A Guide to MEDICINAL PLANTS of Appalachia
THE AUTHORS

ARNOLD KROCHMAL graduated from North Carolina State College in 1942; he received his master's degree in 1951 and his Ph.D. in 1952 from Cornell University in economic botany, with a minor in plant physiology. As a Fulbright professor, he worked in Greece, and has also served in Afghanistan, Honduras, and the U.S. Virgin Islands. He also served as a consultant in Thailand, the Dominican Republic, British Virgin Islands, Jamaica, Montserrat, and Surinam. In 1966 he joined the Forest Service's Northeastern Forest Experiment Station as project leader and principal economic botanist in charge of the Station's timber related crops program, located at Berea, Kentucky.

RUSSELL S. WALTERS graduated from Michigan State University in 1951; he received a master's degree in forest management, with a minor in range management, from Oregon State University in 1953. He began his Forest Service career in 1955 at Carbondale, Illinois. Later that same year, he became superintendent of the Vinton Furnace Experimental Forest in Ohio. In 1958, he was transferred to Athens, Ohio, where he specialized in forest management and silvicultural research for the Forest Service. He is now working with the timber related crops program at Berea, a position he took in 1964.

RICHARD M. DOUGHTY earned his bachelor's and master's degrees in botany at the University of Pittsburgh. He has also done graduate work at Indiana University. In 1951, he joined the staff of the University of Kentucky College of Pharmacy, as instructor in pharmacognosy, the science of drugs from natural sources. He is now chairman of the Materia Medica Department at this University. Professor Doughty also gives lectures on natural products, poisonous plants, herbs, and spices.
A Guide to
MEDICINAL PLANTS
of Appalachia

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

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>PLANT DESCRIPTIONS</td>
<td>3</td>
</tr>
<tr>
<td>Identification</td>
<td>3</td>
</tr>
<tr>
<td>Names</td>
<td>3</td>
</tr>
<tr>
<td>COLLECTING PLANTS</td>
<td>4</td>
</tr>
<tr>
<td>Time of year</td>
<td>4</td>
</tr>
<tr>
<td>Areas</td>
<td>10</td>
</tr>
<tr>
<td>Tools</td>
<td>10</td>
</tr>
<tr>
<td>PROCESSING</td>
<td>11</td>
</tr>
<tr>
<td>Cleaning</td>
<td>11</td>
</tr>
<tr>
<td>Drying</td>
<td>11</td>
</tr>
<tr>
<td>Packaging and storing</td>
<td>14</td>
</tr>
<tr>
<td>COLLECTING POLLEN</td>
<td>15</td>
</tr>
<tr>
<td>Methods</td>
<td>15</td>
</tr>
<tr>
<td>Drying</td>
<td>16</td>
</tr>
<tr>
<td>Grass pollen</td>
<td>17</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>18</td>
</tr>
<tr>
<td>GLOSSARY</td>
<td>21</td>
</tr>
<tr>
<td>GUIDE TO THE PLANTS</td>
<td>27</td>
</tr>
<tr>
<td>INDEX OF COMMON PLANT NAMES</td>
<td>281</td>
</tr>
</tbody>
</table>
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*

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

*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-fruited 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

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

CONTINUED
<table>
<thead>
<tr>
<th>Plant</th>
<th>B</th>
<th>BR</th>
<th>BU</th>
<th>EP</th>
<th>F</th>
<th>FL</th>
<th>H</th>
<th>J/S</th>
<th>L</th>
<th>RR</th>
<th>SE</th>
<th>ST</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. Berberis vulgaris L.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Betula lenta L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>26. Caulophyllum thalictroides (L.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Ceanothus americanus L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>28. Chamaelirium luteum (L.) Gray</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Chelone glabra L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Chenopodium ambrosioides L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Chimaphila maculata (L.) Pursh.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Chimaphila umbellata (L.) Bart.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Chionanthus virginicus L.</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>34. Cimicifuga americana Michx.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>35. Cimicifuga racemosa (L.) Nutt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>36. Gnicus benedictus L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Collinsonia canadensis L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Comptonia peregrina (L.) Coulth.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. Corallorhiza spp.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. Cypripedium calceolus L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>41. Datura stramonium L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>42. Dioscorea villosa L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Echinacea purpurea (L) Moench.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44. Eryngium aquaticum L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Euonymus atropurpureus Jacq.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Eupatorium perfoliatum L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. Eupatorium purpureum L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. Fragaria virginiana Duch.</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. Fraxinus americana L.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. Galium aparine L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Species</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>Gaultheria procumbens L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>Gelsemium sempervirens (L.) Ait.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>Gentiana villosa L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>Geranium maculatum L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55.</td>
<td>Hamamelis virginiana L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>Hepatica acutiloba (D.C.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>Hydrangea arborescens L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59.</td>
<td>Hydrastis canadensis L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60.</td>
<td>Jeffersonia diphylla (L.) Pers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>Juglans cinerea L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>Juglans nigra L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Juniperus communis L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td>Juniperus virginiana L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65.</td>
<td>Lactuca scariola L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>Leonurus cardiaca L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>Lindera benzoin (L) Blume</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td>Liquidambar styraciflua L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>Lobelia inflata L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70.</td>
<td>Lycoporus virgincus L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>Marrubium vulgare L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72.</td>
<td>Menispernum canadense L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73.</td>
<td>Mentha piperita L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74.</td>
<td>Mentha spicata L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75.</td>
<td>Mitchella repens L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76.</td>
<td>Monarda didyma L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77.</td>
<td>Myrica cerifera L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONTINUED
<table>
<thead>
<tr>
<th>Plant</th>
<th>B</th>
<th>BR</th>
<th>BU</th>
<th>EP</th>
<th>F</th>
<th>FL</th>
<th>H</th>
<th>J/S</th>
<th>L</th>
<th>RR</th>
<th>SE</th>
<th>ST</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>78. Nasturtium officinale R. Br.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>79. Nepeta cataria L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80. Panax quinquefolium L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81. Passiflora incarnata L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82. Phytolacca americana L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83. Pinus palustris Mill.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>84. Pinus strobus L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85. Plantago spp.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>86. Podophyllum peltatum L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>87. Polygala senega L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>88. Polygonatum biflorum (Walt.) Ell.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>89. Polygognum hydropiper L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90. Populus balsamifera L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91. Prunella vulgaris L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92. Prunus serotina Ehrh.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>93. Quercus alba L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>94. Rhus glabra L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95. Rubus spp. L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>96. Rumex crispus L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>97. Salix alba L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>98. Salix nigra (Marsh)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>99. Salvia officinalis L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100. Sanguinaria canadensis L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101. Sassafras albidum (Nutt) Nels.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>102. Scrophularia marilandica L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>103. Scutellaria lateriflora L.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>104. Senecio aureus (L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>105.</td>
<td>Solanum carolinense (L)</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>106.</td>
<td>Sorbus americana Marsh.</td>
<td>x</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>107.</td>
<td>Spigelia marilandica L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>108.</td>
<td>Stellaria media (L) Cyrillo</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>109.</td>
<td>Stillinigia sylvatica L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110.</td>
<td>Tanacetum vulgare L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>111.</td>
<td>Tephrosia virginiana (L) Pers.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>112.</td>
<td>Tiarella cordifolia L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>113.</td>
<td>Trifolium pratense L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>114.</td>
<td>Trilisa odoratissima (Walt.) Cass.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>115.</td>
<td>Trillium erectum L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>116.</td>
<td>Tsuga canadensis (L) Carr.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>117.</td>
<td>Ulmus rubra Muhl.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>118.</td>
<td>Veratrum viride (Ait.)</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>119.</td>
<td>Verbascum thapsus L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120.</td>
<td>Verbena hastata L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>121.</td>
<td>Veronicastrum virginicum (L) Farw.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>122.</td>
<td>Viburnum nudum (L)</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>123.</td>
<td>Viburnum prunifolium L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124.</td>
<td>Xanthorrhiza simplicissima (Marsh.)</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>125.</td>
<td>Xanthoxylum americanum Mill.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>126.</td>
<td>Xanthoxylum clava-herculis L.</td>
<td>................................</td>
<td>x</td>
<td>................................</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

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.](image)

**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.
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).
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.

Burn, Harold.

Claus, Edward P., and Varro E. Tyler, Jr.

Collingwood, G. H., and Warren D. Brush.
Amer. Forestry Assoc., Washington, D. C.

Coon, Nelson.

Curtin, L. S. M.
1947. Healing herbs of the Upper Rio Grande. 281 pp., illus. Lab. Anthrop., Santa Fe, N. M.

Darlington, William.

Edward, Bertie.

Fernald, Merritt Lyndon.

Fernald, Merritt Lyndon.

Ford, Thomas R.

Fowells, H. A.

Gibbons, Euell.

Gleason, Henry A.

Gosselin, Raymond.

Greer Drug and Chemical Corporation.

Grieve, M.

Hardin, James W.

Harding, A. R.

Hocking, George.

Imbesi, A.
1964. Index plantarum quet in omnium populorum pharmacopoieis sunt. 771 pp. Adhuc Receptae, Messina, Sicily, Italy.

Jacobs, Marion Lee, and Henry M. Burlage.

Jaques, H. E.
1959. How to know the weeds. 256 pp., illus. Wm. C. Brown Co., Dubuque, Iowa.


Kingsbury, John M.

Kreig, Margaret.

Krochmal, Arnold.
Acta Phytotherapeutica.

American Journal of Pharmacy.

American Perfume and Essential Oil Review.
1906-68. New York.

Bibliography of Forest and Forestry Products.

Biologia (monthly suppl. to Chronica Botanica).
1947-68. Waltham, Mass.

Bulletin of Miscellaneous Information.

1934-68. Cincinnati.

Chemurgic Digest.

Digest of Comments on the Pharmacopoea of the United States and on the National Formulary.
Drug and Cosmetic Industry.

Drug Topics.

Drug Trade News.

Drug Treatises.

Economic Botany.

Excerpta Botanica Sectio A.

Farmacognosia.
1938-68. Instituto Jose Celestino Mutis, de Farmacognosia, Madrid.

Fitotherapia.
1929-68. Inverni & Della Beffa S.p.a., Milan.

Lloydia.
1937-68. Lloyd Library, Cincinnati.

Qualitas Plantarum et Materiae Vegetabiles.

Quarterly Journal of Crude Drug Research.
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.
Antiinfective. Prevents or inhibits infection.
Anti-inflammatory. Reduces inflammation and swelling.
Antinauseant. Stops or lessens the tendency to become nauseated.
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.
Cork. 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.
Cumari. 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.
Detachtable. 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.
Ophthalmic. 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.


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.

Taenifuge. 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.
Farinoso. Covered with whitish mealy powder.
Frondosa. 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.
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.
Strobus. 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 ¼ 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 opthalmiatric. 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)
ADIANUTUM 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.
ADIANUM 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.
ADIANUM 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)
AERTRIS 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 opthalmiatric. 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 ATROPURPURA L.

(UMBELLIFERAE)
APLECTRUM HYEMALE (MUHL.) TORR.
(ORCHIDACEAE)


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)


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.
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)

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 gonorrhea and syphilis. In Appalachia, a tea of roots or seeds is used to treat rheumatism and to purify the blood.
ARCTIUM LAPPA L.

(ASTERACAE)
**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)


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, snakerooot, 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.
**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 ½ inch long, and form brown ½-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)
CHAMAELIRIUM 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.
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 $\frac{1}{2}$ 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, cohoosh, columbine-leaved leontice, cordate rattle-top, false cohoosh, 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, fergate, 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 ¼ 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.)

(OCHRIDACEAE)
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 $\frac{1}{2}$ 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, Joepy, sweating plant, sweating weed, teagel, thorough-stem, thoroughwax, thoroughwort, through-stem, 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)


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, milk sweet, 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.

(RUBİACEAE)
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 ACUTILIOBA 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 DIPHYLLA (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)
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)
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 3 1/2 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 1 1/2 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)
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 ⅛ 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)
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, Benja-
min 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, desharpener 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 INFALATA 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.
**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)
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)
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.
NASTURTIIUM 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, granto- gen, 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 waste-lands.

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, pokeroor, red-ink plant, red wood, scoke, 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.

(PHYTOLACCACEAE)
PINUS PALUSTRIS MILL.

(PINACEAE)


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)


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)
PODOCYLLUM 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 1 ½ 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 padophyllin, 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 snakeroot, 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)
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)
**POPLAR 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 sassafras, saxifræs, 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)
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)
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)


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 vemifuge. 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, unstilla, 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)
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 gobular 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, illscented trillium, illscented 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 false hellebore, 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.
VERONICA STRUM VIRGINICUM (L.) FARW.
(SCROPHULARIACEAE)


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.
VERONICA STRUM 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.
**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 part ed 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)
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

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Page No.</th>
<th>Scientific Name</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaron’s rod</td>
<td>264</td>
<td>American spindle tree</td>
<td>116</td>
</tr>
<tr>
<td>Adam-and-Eve root</td>
<td>48</td>
<td>American storax</td>
<td>162</td>
</tr>
<tr>
<td>Adam’s flannel</td>
<td>264</td>
<td>American sweetgum</td>
<td>162</td>
</tr>
<tr>
<td>Adder’s mouth</td>
<td>242</td>
<td>American tormentil</td>
<td>134</td>
</tr>
<tr>
<td>Ague grass</td>
<td>40</td>
<td>American tree</td>
<td>260</td>
</tr>
<tr>
<td>Ague horn</td>
<td>40</td>
<td>American twinleaf</td>
<td>146</td>
</tr>
<tr>
<td>Agueroot</td>
<td>40</td>
<td>American valerian</td>
<td>106</td>
</tr>
<tr>
<td>Ague tree</td>
<td>228</td>
<td>American vegetable tallow</td>
<td>180</td>
</tr>
<tr>
<td>Ague-weed</td>
<td>118</td>
<td>American vegetable wax</td>
<td>180</td>
</tr>
<tr>
<td>Alder</td>
<td>42</td>
<td>American walnut</td>
<td>150</td>
</tr>
<tr>
<td>Aletris root</td>
<td>40</td>
<td>American wormroot</td>
<td>240</td>
</tr>
<tr>
<td>Alexanders</td>
<td>46</td>
<td>American wormseed</td>
<td>86</td>
</tr>
<tr>
<td>Allegany foamflower</td>
<td>250</td>
<td>American white ash</td>
<td>124</td>
</tr>
<tr>
<td>Allspice bush</td>
<td>160</td>
<td>American white hellebore</td>
<td>262</td>
</tr>
<tr>
<td>Aloe</td>
<td>40</td>
<td>American white pine</td>
<td>194</td>
</tr>
<tr>
<td>Aloeroot</td>
<td>40</td>
<td>Angerica</td>
<td>46</td>
</tr>
<tr>
<td>Alum bloom</td>
<td>134</td>
<td>Apple of Peru</td>
<td>108</td>
</tr>
<tr>
<td>Alumroot</td>
<td>134</td>
<td>Apple of Sodom</td>
<td>236</td>
</tr>
<tr>
<td>Alumroot</td>
<td>86</td>
<td>Apple Per</td>
<td>108</td>
</tr>
<tr>
<td>Ambrosia</td>
<td>86</td>
<td>Apricot vine</td>
<td>188</td>
</tr>
<tr>
<td>Ambrosia-like chenopodium</td>
<td>86</td>
<td>Aromatic wintergreen</td>
<td>128</td>
</tr>
<tr>
<td>American alder</td>
<td>42</td>
<td>Archangel</td>
<td>46</td>
</tr>
<tr>
<td>American angelica</td>
<td>46</td>
<td>Aromatic wintergreen</td>
<td>128</td>
</tr>
<tr>
<td>American ash</td>
<td>124</td>
<td>Arrow-wood</td>
<td>116</td>
</tr>
<tr>
<td>American barberry</td>
<td>74</td>
<td>Arsmart</td>
<td>204</td>
</tr>
<tr>
<td>American bee balm</td>
<td>178</td>
<td>Ash</td>
<td>124</td>
</tr>
<tr>
<td>American bugbane</td>
<td>94</td>
<td>Asthma weed</td>
<td>164</td>
</tr>
<tr>
<td>American deal pine</td>
<td>194</td>
<td>Astringent root</td>
<td>134</td>
</tr>
<tr>
<td>American falsehellebore</td>
<td>262</td>
<td>Atlantic yam</td>
<td>110</td>
</tr>
<tr>
<td>American falsepennyroyal</td>
<td>138</td>
<td>Aunt Jerichos</td>
<td>46</td>
</tr>
<tr>
<td>American fringe tree</td>
<td>92</td>
<td>Backache root</td>
<td>40</td>
</tr>
<tr>
<td>American ginseng</td>
<td>186</td>
<td>Ball nettle</td>
<td>236</td>
</tr>
<tr>
<td>American hellebore</td>
<td>262</td>
<td>Ball balm</td>
<td>206</td>
</tr>
<tr>
<td>American hemp</td>
<td>52</td>
<td>Balm buds</td>
<td>206</td>
</tr>
<tr>
<td>American ipecac</td>
<td>50</td>
<td>Balm of Gilead</td>
<td>206</td>
</tr>
<tr>
<td>American kind</td>
<td>134</td>
<td>Balsam poplar</td>
<td>206</td>
</tr>
<tr>
<td>American maidenhair</td>
<td>36</td>
<td>Barberry</td>
<td>74</td>
</tr>
<tr>
<td>American mountainash</td>
<td>238</td>
<td>Bath flower</td>
<td>256</td>
</tr>
<tr>
<td>American nightshade</td>
<td>190</td>
<td>Bathwort</td>
<td>256</td>
</tr>
<tr>
<td>American pennyroyal</td>
<td>138</td>
<td>Battle weed</td>
<td>96</td>
</tr>
<tr>
<td>American pricklyash</td>
<td>276</td>
<td>Bearberry</td>
<td>180</td>
</tr>
<tr>
<td>American rose war</td>
<td>238</td>
<td>Bayberry tallow</td>
<td>180</td>
</tr>
<tr>
<td>American service tree</td>
<td>238</td>
<td>Bayberry waxtree</td>
<td>180</td>
</tr>
<tr>
<td>American skullcap</td>
<td>232</td>
<td>Bearcorn</td>
<td>262</td>
</tr>
<tr>
<td>American spikenard</td>
<td>54, 56</td>
<td>Bearing myrica</td>
<td>180</td>
</tr>
</tbody>
</table>

281
<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Page</th>
<th>Synonym</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaumont root</td>
<td>268</td>
<td>Blue verbena</td>
<td>266</td>
</tr>
<tr>
<td>Bedstraw</td>
<td>126</td>
<td>Blue vervain</td>
<td>266</td>
</tr>
<tr>
<td>Bee balm</td>
<td>178</td>
<td>Bog onion</td>
<td>62</td>
</tr>
<tr>
<td>Beewort</td>
<td>32</td>
<td>Boneset</td>
<td>118</td>
</tr>
<tr>
<td>Beggars buttons</td>
<td>58</td>
<td>Bowman's root</td>
<td>52, 268</td>
</tr>
<tr>
<td>Bellyache root</td>
<td>46</td>
<td>Buxberry</td>
<td>128</td>
</tr>
<tr>
<td>Benjamin bush</td>
<td>160</td>
<td>Brambleberry</td>
<td>216</td>
</tr>
<tr>
<td>Bergamot</td>
<td>178</td>
<td>Brandy mint</td>
<td>172</td>
</tr>
<tr>
<td>Berried tea</td>
<td>128</td>
<td>Broad leaf collinsonia</td>
<td>100</td>
</tr>
<tr>
<td>Bethroot</td>
<td>256</td>
<td>Broadleaved clover</td>
<td>252</td>
</tr>
<tr>
<td>Bettroot</td>
<td>256</td>
<td>Broad-leaved sarabacca</td>
<td>66</td>
</tr>
<tr>
<td>Bigbane</td>
<td>262</td>
<td>Brown mint</td>
<td>174</td>
</tr>
<tr>
<td>Bilsted</td>
<td>162</td>
<td>Brownwort</td>
<td>208, 230</td>
</tr>
<tr>
<td>Biltmore ash</td>
<td>124</td>
<td>Buckeye tree</td>
<td>38</td>
</tr>
<tr>
<td>Biltmore white ash</td>
<td>124</td>
<td>Bugbane</td>
<td>94, 96</td>
</tr>
<tr>
<td>Birthroot</td>
<td>256</td>
<td>Bugleweed</td>
<td>166</td>
</tr>
<tr>
<td>Birthwort</td>
<td>64, 256</td>
<td>Buglewort</td>
<td>166</td>
</tr>
<tr>
<td>Biting knotweed</td>
<td>204</td>
<td>Bull nettle</td>
<td>236</td>
</tr>
<tr>
<td>Bitter grossaria</td>
<td>204</td>
<td>Bullock's lungwort</td>
<td>264</td>
</tr>
<tr>
<td>Biting tongue</td>
<td>204</td>
<td>Bullwort</td>
<td>230</td>
</tr>
<tr>
<td>Bitter ash</td>
<td>116</td>
<td>Bumblebee root</td>
<td>256</td>
</tr>
<tr>
<td>Bitter buttons</td>
<td>246</td>
<td>Burdock</td>
<td>58, 60</td>
</tr>
<tr>
<td>Bitter dock</td>
<td>218</td>
<td>Burning bush</td>
<td>116</td>
</tr>
<tr>
<td>Bitter dogbane</td>
<td>50</td>
<td>Bursting heart</td>
<td>116</td>
</tr>
<tr>
<td>Bitter herb</td>
<td>84</td>
<td>Butterfly milkweed</td>
<td>70</td>
</tr>
<tr>
<td>Bitter pepper root</td>
<td>32</td>
<td>Butterfly weed</td>
<td>70</td>
</tr>
<tr>
<td>Bitter-root</td>
<td>50, 52</td>
<td>Butternut</td>
<td>148</td>
</tr>
<tr>
<td>Bitter thistle</td>
<td>98</td>
<td>Butterweed</td>
<td>234</td>
</tr>
<tr>
<td>Bitterweed</td>
<td>98</td>
<td>Button snakeroot</td>
<td>114</td>
</tr>
<tr>
<td>Bitter wintergreen</td>
<td>90</td>
<td>Button snakeroot eryngo</td>
<td>114</td>
</tr>
<tr>
<td>Black alder</td>
<td>42</td>
<td>Cabinet cherry</td>
<td>210</td>
</tr>
<tr>
<td>Blackberry</td>
<td>216</td>
<td>Calamus</td>
<td>32</td>
</tr>
<tr>
<td>Black birch</td>
<td>76</td>
<td>Canada hemlock</td>
<td>258</td>
</tr>
<tr>
<td>Black cherry</td>
<td>210</td>
<td>Canada moonseed</td>
<td>170</td>
</tr>
<tr>
<td>Black choke</td>
<td>210</td>
<td>Canada root</td>
<td>70</td>
</tr>
<tr>
<td>Black cohosh</td>
<td>96</td>
<td>Canada snakeroot</td>
<td>66</td>
</tr>
<tr>
<td>Black haw</td>
<td>272</td>
<td>Canada wild ginger</td>
<td>66</td>
</tr>
<tr>
<td>Blackhaw viburnum</td>
<td>272</td>
<td>Canadian collinsonia</td>
<td>102</td>
</tr>
<tr>
<td>Black Indian hemp</td>
<td>50</td>
<td>Canadian hemp</td>
<td>52</td>
</tr>
<tr>
<td>Black maidens hair fern</td>
<td>34</td>
<td>Canadian sweetgale</td>
<td>102</td>
</tr>
<tr>
<td>Black psyllium</td>
<td>196</td>
<td>Canadian tea</td>
<td>128</td>
</tr>
<tr>
<td>Blackroot</td>
<td>268</td>
<td>Cancer jalap</td>
<td>190</td>
</tr>
<tr>
<td>Black Sampson</td>
<td>112</td>
<td>Cancerroot</td>
<td>190</td>
</tr>
<tr>
<td>Black snakeroot</td>
<td>66, 96</td>
<td>Cancer root</td>
<td>190</td>
</tr>
<tr>
<td>Black snakeroot</td>
<td>66</td>
<td>Candle alder</td>
<td>42</td>
</tr>
<tr>
<td>Black walnut</td>
<td>150</td>
<td>Candleberry</td>
<td>180</td>
</tr>
<tr>
<td>Black willow</td>
<td>222</td>
<td>Candleberry myrtle</td>
<td>180</td>
</tr>
<tr>
<td>Bladder pod</td>
<td>164</td>
<td>Candlewick</td>
<td>264</td>
</tr>
<tr>
<td>Bladder-podded lobelia</td>
<td>164</td>
<td>Cane ash</td>
<td>134</td>
</tr>
<tr>
<td>Blanket leaf</td>
<td>264</td>
<td>Carduus</td>
<td>98</td>
</tr>
<tr>
<td>Blazing star</td>
<td>40, 82</td>
<td>Careless</td>
<td>44</td>
</tr>
<tr>
<td>Bleeding heart</td>
<td>116</td>
<td>Carolina cedar</td>
<td>154</td>
</tr>
<tr>
<td>Blessed carduus</td>
<td>98</td>
<td>Carolina horse nettle</td>
<td>236</td>
</tr>
<tr>
<td>Blessed thistle</td>
<td>98</td>
<td>Carolina jessamine</td>
<td>130</td>
</tr>
<tr>
<td>Blond psyllium</td>
<td>190</td>
<td>Carolina pink</td>
<td>240</td>
</tr>
<tr>
<td>Bloodroot</td>
<td>226</td>
<td>Carolina pinkroot</td>
<td>240</td>
</tr>
<tr>
<td>Bloodwort</td>
<td>30</td>
<td>Carolina poplar</td>
<td>206</td>
</tr>
<tr>
<td>Blueberry</td>
<td>96</td>
<td>Carpenter's grass</td>
<td>30</td>
</tr>
<tr>
<td>Blueberry cohosh</td>
<td>78</td>
<td>Carpenter's herb</td>
<td>166, 208</td>
</tr>
<tr>
<td>Blueberry root</td>
<td>78</td>
<td>Carpenter's square</td>
<td>230</td>
</tr>
<tr>
<td>Blue cohosh</td>
<td>78</td>
<td>Carpenterweel</td>
<td>208</td>
</tr>
<tr>
<td>Blue curbs</td>
<td>208</td>
<td>Catchfly</td>
<td>50</td>
</tr>
<tr>
<td>Blue ginseng</td>
<td>78, 96</td>
<td>Catchweed</td>
<td>126</td>
</tr>
<tr>
<td>Blue pimprenzel</td>
<td>232</td>
<td>Catchweed bedstraw</td>
<td>126</td>
</tr>
<tr>
<td>Blue skullcap</td>
<td>232</td>
<td>Catfoot</td>
<td>66</td>
</tr>
<tr>
<td>Bluestem Joe-pyweed</td>
<td>120</td>
<td>Catgut</td>
<td>248</td>
</tr>
</tbody>
</table>
Catmint 184  Common pipsissewa 90
Catnep 184  Common pokeberry 190
Catnip 184  Common pricklyash 276
Castrup 184  Common red clover 252
Catwort 184  Common sassafras 228
Cedar 154  Common selfheal 228
Cedar apple 154  Common silkyweed 208
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 232
Chicus 126  Common witch hazel 136
Chidkerberry 128  Common yarrow 30
Chigger flower 70  Compass plant 215
China root 110  Conquer-John 202
Chocolate flower 134  Coolwart 250
Chocaw root 52  Coonroot 226
Choke cherry 210  Coralroot 104
Chongras 190  Cordate rattle-top 96
Cinnamon wood 228  Corn snakeroot 114
Citrone 100  Cottonweed 68
Citrone 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
Cloverwurt 126  Cranesbill geranium 134
Clink 128  Crawleyroot 104
Clothbur 58, 60  Creep-chercher 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
Cocyshot 244  Cuckoo plant 62
Coleosh 96  Culver's physic 268
Coleosh 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  Daffydown-dilly 256
Columbine-leaved leontice 96  Dead nettle 46
Combflower 112  Deer berry 128, 176
Common alder 42  Deerstongue 254
Common angelica 46  Devil's apple 198
Common barberry 74  Devil's bit 40, 82
Common boneset 118  Devil's-bite 262
Common burdock 60  Devil's bones 110
Common chickweed 242  Devil's shoe strings 248
Common clover 252  Devil's trumpet 108
Common crane's bill 134  Dewberry 128, 216
Common dog's bane 50  Dioscorea 110
Common horsebarn 168  Dishcloth 256
Common horehound 168  Dock 218
Common horsechestnut 38  Dogbane 50
Common juniper 152  Dogberry 238
Common mayapple 198  Dog daisy 30
Common milkweed 68  Dogtongue 254
Common mint 174  Doorweed 204
Common moonseed 170  Double tansy 246
Common motherwort 158  Dove's foot 134
Common mullein 264
<p>| 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 |                  |     |
| Dutchmanspice       | 64  | Gagroot          | 164 |
| Dwarf groundnut     | 186 | Garantogen       | 186 |
| Dwarf juniper       | 152 | Garden mint      | 174 |
| Dwarf solomon’s seal | 202 | Garden patience  | 218 |
| Dyer’s baptismia    | 72  | Garden sage      | 224 |
| Eastern black walnut| 150 | Garentoqueur     | 186 |
| Eastern hemlock     | 258 | Garget           | 190 |
| Eastern redcedar    | 154 | Gem fruit        | 250 |
| Eastern wahoo       | 116 | Ginseng          | 186 |
| Eastern white pine  | 194 | Georgia pine     | 194 |
| 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 | Goose foot       | 86  |
| Eyeroot             | 144 | Goosefoot maple  | 28  |
| Fairywand           | 82  | Goosegrass       | 126 |
| False bitterwort    | 250 | Goose’s hare     | 126 |
| False cohosh        | 96  | Gordoloba        | 30  |
| False colt’s foot   | 66  | Gorst            | 152 |
| False hellebore     | 262 | Grantogen        | 186 |
| False indigo        | 72  | Gravelroot       | 120 |
| False jasmine       | 130 | Gray beard tree  | 92  |
| False jessamine     | 130 | Gray elm         | 260 |
| False miterwort     | 250 | Great angelica   | 46  |
| False sarsaparilla  | 54  | Great burdock    | 58  |
| False unicorn       | 82  | Great mullein    | 264 |
| False unicorn root  | 40  | Great pilewort   | 230 |
| False valerian      | 234 | Green alder      | 42  |
| Fat pine            | 192 | Green amaranth   | 44  |
| Feltwort            | 264 | Green arrow      | 30  |
| Female regulator    | 234 | Green hellebore  | 262 |
| Fern bush           | 102 | Green opened amaranth | 44 |
| Ferngate            | 102 | Ground holly     | 90, 128 |
| Fern gate           | 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 |
| Filnute             | 148 | Grouse berry     | 128 |
| Fishmouth           | 84  | Grub root        | 82  |
| Five fingers        | 186 | Guild tree       | 74  |
| Flagroot            | 32  | Gypsyweed        | 166 |
| Flannel leaf        | 264 | Gypswort         | 166 |
| Flannel mullein     | 264 |                  |     |
| Flannel plant       | 264 | Hackmatack       | 152, 206 |
| Fleeceeed           | 196 | Hair fern        | 36  |
| Flowering plant     | 92  | Hairy solomon’s seal | 202 |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Number</th>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamamelis</td>
<td>136</td>
<td>Indian paint</td>
<td>144</td>
</tr>
<tr>
<td>Hard hack</td>
<td>100</td>
<td>Indian pink</td>
<td>240</td>
</tr>
<tr>
<td>Hard pine</td>
<td>192</td>
<td>Indian physic</td>
<td>52</td>
</tr>
<tr>
<td>Hare’s beard</td>
<td>264</td>
<td>Indian plant</td>
<td>144</td>
</tr>
<tr>
<td>Hazel alder</td>
<td>42</td>
<td>Indian plantago</td>
<td>196</td>
</tr>
<tr>
<td>Heal-all</td>
<td>100, 208, 230</td>
<td>Indian poke</td>
<td>262</td>
</tr>
<tr>
<td>Heart-leaved rattletop</td>
<td>96</td>
<td>Indian root</td>
<td>56</td>
</tr>
<tr>
<td>Heart-leaved skunkroot</td>
<td>96</td>
<td>Indian sage</td>
<td>118</td>
</tr>
<tr>
<td>Heart liverleaf</td>
<td>140</td>
<td>Indian shamrock</td>
<td>256</td>
</tr>
<tr>
<td>Heart pine</td>
<td>192</td>
<td>Indian’s plume</td>
<td>178</td>
</tr>
<tr>
<td>Heart skunkroot</td>
<td>66</td>
<td>Indian strawberry</td>
<td>122</td>
</tr>
<tr>
<td>Hedgehog</td>
<td>112</td>
<td>Indian tobacco</td>
<td>164, 264</td>
</tr>
<tr>
<td>Hedge tater</td>
<td>264</td>
<td>Indian tobacco lobelia</td>
<td>164</td>
</tr>
<tr>
<td>Helmet flower</td>
<td>232</td>
<td>Indian turmeric</td>
<td>144</td>
</tr>
<tr>
<td>Helmet pod</td>
<td>146</td>
<td>Indian turnip</td>
<td>62</td>
</tr>
<tr>
<td>Helonias</td>
<td>82</td>
<td>Indigo broom</td>
<td>72</td>
</tr>
<tr>
<td>Hemlock</td>
<td>258</td>
<td>Indigo weed</td>
<td>72</td>
</tr>
<tr>
<td>Hemlock fir</td>
<td>258</td>
<td>Inkberry</td>
<td>190</td>
</tr>
<tr>
<td>Hemlock spruce</td>
<td>258</td>
<td>Ironweed</td>
<td>266</td>
</tr>
<tr>
<td>Hemlock spruce pine</td>
<td>258</td>
<td>Iuchweed</td>
<td>262</td>
</tr>
<tr>
<td>Hemp dogbane</td>
<td>52</td>
<td>Ivory plum</td>
<td>128</td>
</tr>
<tr>
<td>Hempweed</td>
<td>120</td>
<td>Jack-in-the-pulpit</td>
<td>62</td>
</tr>
<tr>
<td>Hepatica</td>
<td>140</td>
<td>Jacob’s staff</td>
<td>264</td>
</tr>
<tr>
<td>Hercules club</td>
<td>278</td>
<td>Jalap</td>
<td>190</td>
</tr>
<tr>
<td>Hercules’ club prickly ash</td>
<td>278</td>
<td>Jamestown weed</td>
<td>108</td>
</tr>
<tr>
<td>Hind heal</td>
<td>246</td>
<td>Jasmine</td>
<td>130</td>
</tr>
<tr>
<td>High angelica</td>
<td>46</td>
<td>Jaundice barberry</td>
<td>74</td>
</tr>
<tr>
<td>Hillberry</td>
<td>128</td>
<td>Jaundice berry</td>
<td>74</td>
</tr>
<tr>
<td>Hive vine</td>
<td>176</td>
<td>Jaundice root</td>
<td>144</td>
</tr>
<tr>
<td>Hoarhound</td>
<td>168</td>
<td>Jerusalem tea</td>
<td>86</td>
</tr>
<tr>
<td>Hoary pea</td>
<td>248</td>
<td>Jerusalem oak seed</td>
<td>86</td>
</tr>
<tr>
<td>Hog apple</td>
<td>198</td>
<td>Jesuit tea</td>
<td>86</td>
</tr>
<tr>
<td>Holme’s weed</td>
<td>230</td>
<td>Joe-pyeweed</td>
<td>120</td>
</tr>
<tr>
<td>Holy thistle</td>
<td>98</td>
<td>Jopioo</td>
<td>120</td>
</tr>
<tr>
<td>Honey bloom</td>
<td>50</td>
<td>Jopiebush</td>
<td>152</td>
</tr>
<tr>
<td>Hooded willow herb</td>
<td>232</td>
<td>Jupier’s staff</td>
<td>264</td>
</tr>
<tr>
<td>Hookwort</td>
<td>232</td>
<td>Juniper</td>
<td>152, 154</td>
</tr>
<tr>
<td>Horehound</td>
<td>166, 168</td>
<td>Juniper’s staff</td>
<td>152</td>
</tr>
<tr>
<td>Horse balm</td>
<td>100</td>
<td>Juniper</td>
<td>120</td>
</tr>
<tr>
<td>Horsecystone</td>
<td>38</td>
<td>Juniper’s staff</td>
<td>264</td>
</tr>
<tr>
<td>Horsefey weed</td>
<td>72</td>
<td>Juniper</td>
<td>152</td>
</tr>
<tr>
<td>Horsemint</td>
<td>178</td>
<td>Juniper</td>
<td>152</td>
</tr>
<tr>
<td>Horse nettle</td>
<td>236</td>
<td>Jupiter’s staff</td>
<td>264</td>
</tr>
<tr>
<td>Horse savin</td>
<td>152</td>
<td>King’s cure</td>
<td>90</td>
</tr>
<tr>
<td>Horseweed</td>
<td>100</td>
<td>King-of-the-meadow</td>
<td>120</td>
</tr>
<tr>
<td>Houndsbane</td>
<td>168</td>
<td>Knobgrass</td>
<td>100</td>
</tr>
<tr>
<td>Huskwood</td>
<td>40</td>
<td>Knobroot</td>
<td>100</td>
</tr>
<tr>
<td>Huskworth</td>
<td>40</td>
<td>Knotted root</td>
<td>230</td>
</tr>
<tr>
<td>Hybrid amaranthus</td>
<td>44</td>
<td>Lappa</td>
<td>58</td>
</tr>
<tr>
<td>Hydrastis</td>
<td>144</td>
<td>Larger with-rod</td>
<td>270</td>
</tr>
<tr>
<td>Ice leaf</td>
<td>264</td>
<td>Lemonnum</td>
<td>148</td>
</tr>
<tr>
<td>Illscented trillium</td>
<td>258</td>
<td>Life-of-man</td>
<td>56, 238</td>
</tr>
<tr>
<td>Illscented wakerobin</td>
<td>258</td>
<td>Life-of-man</td>
<td>56, 238</td>
</tr>
<tr>
<td>Indian apple</td>
<td>198</td>
<td>Lady’s foxglove</td>
<td>264</td>
</tr>
<tr>
<td>Indian arrowwood</td>
<td>116</td>
<td>Lady’s hair</td>
<td>34</td>
</tr>
<tr>
<td>Indian balm</td>
<td>236</td>
<td>Lady’s mint</td>
<td>174</td>
</tr>
<tr>
<td>Indian dye</td>
<td>144</td>
<td>Lady-slipper</td>
<td>106</td>
</tr>
<tr>
<td>Indian elm</td>
<td>260</td>
<td>Lamb</td>
<td>172</td>
</tr>
<tr>
<td>Indian ginger</td>
<td>66</td>
<td>Lamb’s quarters</td>
<td>256</td>
</tr>
<tr>
<td>Indian gravelroot</td>
<td>120</td>
<td>Lammint</td>
<td>172</td>
</tr>
<tr>
<td>Indian hemp</td>
<td>50, 52</td>
<td>Lapp</td>
<td>58</td>
</tr>
<tr>
<td>Indian Jack-in-the-pulpit</td>
<td>62</td>
<td>Larger with-rod</td>
<td>270</td>
</tr>
<tr>
<td>Indian mozeunize</td>
<td>238</td>
<td>Lemonnum</td>
<td>148</td>
</tr>
<tr>
<td>Indian noisy</td>
<td>70</td>
<td>Life-of-man</td>
<td>56, 238</td>
</tr>
</tbody>
</table>

285
<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Page Number</th>
<th>Plant Name</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lion's ear</td>
<td>158</td>
<td>Mountain berry</td>
<td>128</td>
</tr>
<tr>
<td>Lion's tail</td>
<td>158</td>
<td>Mountain black cherry</td>
<td>210</td>
</tr>
<tr>
<td>Lion's tart</td>
<td>158</td>
<td>Mountain bugbane</td>
<td>94</td>
</tr>
<tr>
<td>Liquid storax</td>
<td>162</td>
<td>Mountain flax</td>
<td>200</td>
</tr>
<tr>
<td>Liverleaf</td>
<td>140</td>
<td>Mountain mahogany</td>
<td>76</td>
</tr>
<tr>
<td>Liverwort</td>
<td>140</td>
<td>Mountain maple</td>
<td>28</td>
</tr>
<tr>
<td>Lobelia</td>
<td>164</td>
<td>Mountain maple bush</td>
<td>28</td>
</tr>
<tr>
<td>Long boughs</td>
<td>136</td>
<td>Mountain mint</td>
<td>178</td>
</tr>
<tr>
<td>Longleaf pine</td>
<td>192</td>
<td>Mountain rattle top</td>
<td>94</td>
</tr>
<tr>
<td>Longleaf yellow pine</td>
<td>192</td>
<td>Mountain sumac</td>
<td>238</td>
</tr>
<tr>
<td>Longstraw pine</td>
<td>192</td>
<td>Mountain tea</td>
<td>128</td>
</tr>
<tr>
<td>Lords and ladies</td>
<td>62</td>
<td>Mountain teaberry</td>
<td>128</td>
</tr>
<tr>
<td>Love-in-winter</td>
<td>90</td>
<td>Mullein</td>
<td>264</td>
</tr>
<tr>
<td>Love lies bleeding</td>
<td>44</td>
<td>Mullein dock</td>
<td>264</td>
</tr>
<tr>
<td>Low balm</td>
<td>178</td>
<td>Murrian grass</td>
<td>230</td>
</tr>
<tr>
<td>Low maple</td>
<td>28</td>
<td>Myrtle</td>
<td>180</td>
</tr>
<tr>
<td>Mad apple</td>
<td>108</td>
<td>Myrtle flag</td>
<td>32</td>
</tr>
<tr>
<td>Mad dog</td>
<td>232</td>
<td>Narrow dock</td>
<td>218</td>
</tr>
<tr>
<td>Mad-dog skullcap</td>
<td>232</td>
<td>Nasturtium</td>
<td>182</td>
</tr>
<tr>
<td>Mad-dog weed</td>
<td>232</td>
<td>Nerve root</td>
<td>106</td>
</tr>
<tr>
<td>Madweed</td>
<td>232</td>
<td>Nettle potato</td>
<td>244</td>
</tr>
<tr>
<td>Maidenhair</td>
<td>34, 36</td>
<td>New England pine</td>
<td>194</td>
</tr>
<tr>
<td>Maidenhair fern</td>
<td>36</td>
<td>New Jersey tea</td>
<td>80</td>
</tr>
<tr>
<td>Mandrake</td>
<td>198</td>
<td>Niggerweed</td>
<td>120</td>
</tr>
<tr>
<td>Man's health</td>
<td>186</td>
<td>Nightshade</td>
<td>236</td>
</tr>
<tr>
<td>Mantoot</td>
<td>186</td>
<td>Ninsin</td>
<td>186</td>
</tr>
<tr>
<td>Maple vine</td>
<td>170</td>
<td>Nip</td>
<td>184</td>
</tr>
<tr>
<td>Marcomy</td>
<td>244</td>
<td>Noble liverwort</td>
<td>140</td>
</tr>
<tr>
<td>Martrhue</td>
<td>168</td>
<td>Noble pine</td>
<td>90</td>
</tr>
<tr>
<td>Marrub</td>
<td>168</td>
<td>Northern pine</td>
<td>194</td>
</tr>
<tr>
<td>Marrubium</td>
<td>168</td>
<td>Northern pricklyash</td>
<td>276</td>
</tr>
<tr>
<td>Marsh gentian</td>
<td>132</td>
<td>Northern white pine</td>
<td>194</td>
</tr>
<tr>
<td>Marsh milkweed</td>
<td>120</td>
<td>Nosebleed</td>
<td>30, 256</td>
</tr>
<tr>
<td>Marshpepper smartweed</td>
<td>204</td>
<td>Notch-leaved alder</td>
<td>42</td>
</tr>
<tr>
<td>Maryland figwort</td>
<td>230</td>
<td>Obelia</td>
<td>164</td>
</tr>
<tr>
<td>Maryland pinkroot</td>
<td>240</td>
<td>Ohio curcuma</td>
<td>144</td>
</tr>
<tr>
<td>Marvel</td>
<td>168</td>
<td>Oilnut</td>
<td>148</td>
</tr>
<tr>
<td>Masse-misse</td>
<td>238</td>
<td>Old maid's-nightcap</td>
<td>134</td>
</tr>
<tr>
<td>Masterwort</td>
<td>46</td>
<td>Old man's beard</td>
<td>92</td>
</tr>
<tr>
<td>Masterwort aromatic</td>
<td>46</td>
<td>Old man's flannel</td>
<td>264</td>
</tr>
<tr>
<td>Mayapple</td>
<td>198</td>
<td>Old man's pepper</td>
<td>30</td>
</tr>
<tr>
<td>Maypop</td>
<td>188</td>
<td>Old man's root</td>
<td>56</td>
</tr>
<tr>
<td>Maypop herb</td>
<td>188</td>
<td>One berry</td>
<td>176</td>
</tr>
<tr>
<td>Maypop passionflower</td>
<td>188</td>
<td>Orange apocynum</td>
<td>70</td>
</tr>
<tr>
<td>Meadow clover</td>
<td>252</td>
<td>Orange blossom</td>
<td>256</td>
</tr>
<tr>
<td>Meadow fern</td>
<td>102</td>
<td>Orange milkweed</td>
<td>70</td>
</tr>
<tr>
<td>Meadow-rue leontice</td>
<td>96</td>
<td>Orange root</td>
<td>70, 144</td>
</tr>
<tr>
<td>Meadow sage</td>
<td>224</td>
<td>Orange swallow-wort</td>
<td>70</td>
</tr>
<tr>
<td>Meadow turnip</td>
<td>62</td>
<td>Oswego bee balm</td>
<td>178</td>
</tr>
<tr>
<td>Mealy starwort</td>
<td>40</td>
<td>Oswego tea</td>
<td>178</td>
</tr>
<tr>
<td>Memory root</td>
<td>62</td>
<td>Our-lady's-thistle</td>
<td>98</td>
</tr>
<tr>
<td>Mexican tea</td>
<td>86</td>
<td>Ox balm</td>
<td>100</td>
</tr>
<tr>
<td>Milfoil</td>
<td>30</td>
<td>Papoose root</td>
<td>78, 96</td>
</tr>
<tr>
<td>Milk ipecac</td>
<td>50</td>
<td>Parsley fern</td>
<td>246</td>
</tr>
<tr>
<td>Milksweet</td>
<td>126</td>
<td>Partridgeberry</td>
<td>128, 176</td>
</tr>
<tr>
<td>Milkweed</td>
<td>50, 52, 68</td>
<td>Passionflower</td>
<td>188</td>
</tr>
<tr>
<td>Milkwort</td>
<td>200</td>
<td>Passion vine</td>
<td>188</td>
</tr>
<tr>
<td>Missy-massy</td>
<td>238</td>
<td>Pauson</td>
<td>226</td>
</tr>
<tr>
<td>Missey-mossey</td>
<td>238</td>
<td>Pegwood</td>
<td>116</td>
</tr>
<tr>
<td>Mock pennyroyal</td>
<td>138</td>
<td>Pelican flower</td>
<td>64</td>
</tr>
<tr>
<td>Moonseed</td>
<td>170</td>
<td>Pellitory bark</td>
<td>276</td>
</tr>
<tr>
<td>Moose elm</td>
<td>260</td>
<td>Pencil cedar</td>
<td>154</td>
</tr>
<tr>
<td>Motherwort</td>
<td>120, 158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain ash</td>
<td>238</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain balm</td>
<td>178</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Pennsylvania sumach 214  Queen-of-the-meadow 120
Pennroyal 138  Queensdelight 244
Pennroyal 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  Rabbit's root 54
Pepper wood 278  Rabbit pea 248
Pepisssewa 88  Raccoonberry 198
Perennial wormgrass 240  Ragwort 234
Peter's staff 264  Raspberry 216
Pettor morrel 56  Ratsbane 88
Physic root 268  Rattle bush 72
Pigeonberry 128, 190  Rattle-root 96
Pigeon weed 56  Rattlesnake flag 114
Pig weed 44  Rattlesnake master 114
Pilewort 230  Rattlesnake root 82, 96, 200, 256
Pine root 32  Rattlesnake weed 114
Pine tulip 90  Rattletop 96
Pinkroot 240  Rattleweed 72, 96
Pinkroot spigelia 240  Red alder 42
Pipisssewa 90  Red balm 178
Pistachio 136  Red Benjamin 256
Pitch pine 192  Redberry 186
Plantago 196  Red-berry tea 128
Plantain 196  Red cedar 154
Pleurisy root 70  Red clover 252
Pocan 190  Red cockscomb 44
Pocan bush 190  Red elm 260
Podophyllum 198  Red gum 162
Poison ash 92  Red Indian paint 226
Poke 190  Red-ink plant 190
Pokberry 190  Red juniper 154
Pokeweed 190  Red knees 204
Poor robin 126  Red polkom 128
Polar balsam 206  Red puccoon 226
Possumhaw 270  Red root 80, 226
Possumhaw viburnum 270  Red sassafras 228
Prickly lettuce 156  Red savin 154
Pricklyash 276, 278  Red shanks 204
Priest's pintl 62  Red shrubs 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
Pukeweeds 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 echnacea 112  Rock fern 36
Purple feet 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
Putty willow 222  Rubber root 70
Puttyroot 48  Rum cherry 210
Pyrole 90  Running cherry 176
<table>
<thead>
<tr>
<th>Herb Name</th>
<th>Page</th>
<th>Common Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage</td>
<td>224</td>
<td>Slender pigweed</td>
<td>44</td>
</tr>
<tr>
<td>Sage of Bethlehem</td>
<td>174</td>
<td>Slim amaranth</td>
<td>44</td>
</tr>
<tr>
<td>St. Benedict’s thistle</td>
<td>98</td>
<td>Slippery elm</td>
<td>260</td>
</tr>
<tr>
<td>Salt-rheum weed</td>
<td>84</td>
<td>Sloe</td>
<td>272</td>
</tr>
<tr>
<td>Sampson’s snakeroot</td>
<td>132</td>
<td>Sloe-leaved viburnum</td>
<td>272</td>
</tr>
<tr>
<td>Sand brier</td>
<td>236</td>
<td>Smaller burdock</td>
<td>60</td>
</tr>
<tr>
<td>Sang</td>
<td>186</td>
<td>Small golden slipper</td>
<td>106</td>
</tr>
<tr>
<td>Sangrel</td>
<td>64</td>
<td>Small-Jack-in-the-pulpit</td>
<td>62</td>
</tr>
<tr>
<td>Sangrel-root</td>
<td>64</td>
<td>Small moccasin flower</td>
<td>106</td>
</tr>
<tr>
<td>Sanguinary</td>
<td>30</td>
<td>Smallseed white ash</td>
<td>124</td>
</tr>
<tr>
<td>Sapgum</td>
<td>162</td>
<td>Small solomon seal</td>
<td>202</td>
</tr>
<tr>
<td>Sarsaparil</td>
<td>54</td>
<td>Small spikenard</td>
<td>54</td>
</tr>
<tr>
<td>Sarsaparilla</td>
<td>54</td>
<td>Small spikeweed</td>
<td>54</td>
</tr>
<tr>
<td>Sarsaparilla root</td>
<td>54</td>
<td>Small yellow lady slipper</td>
<td>106</td>
</tr>
<tr>
<td>Sassafras</td>
<td>228</td>
<td>Smartweed</td>
<td>204</td>
</tr>
<tr>
<td>Satin flower</td>
<td>242</td>
<td>Smelling stick</td>
<td>228</td>
</tr>
<tr>
<td>Savin</td>
<td>154</td>
<td>Smooth alder</td>
<td>42</td>
</tr>
<tr>
<td>Savoyan</td>
<td>126</td>
<td>Smooth hydrangea</td>
<td>142</td>
</tr>
<tr>
<td>Saxifrass</td>
<td>228</td>
<td>Smooth pigweed</td>
<td>44</td>
</tr>
<tr>
<td>Scarlet balm</td>
<td>178</td>
<td>Smooth sumac</td>
<td>214</td>
</tr>
<tr>
<td>Scarlet sage</td>
<td>224</td>
<td>Smooth snakehead</td>
<td>84</td>
</tr>
<tr>
<td>Scarlet strawberry</td>
<td>122</td>
<td>Snakebite</td>
<td>226</td>
</tr>
<tr>
<td>Scarlet sumac</td>
<td>214</td>
<td>Snakehead</td>
<td>84</td>
</tr>
<tr>
<td>Scented fern</td>
<td>246</td>
<td>Nakemounth</td>
<td>84</td>
</tr>
<tr>
<td>Scone</td>
<td>190</td>
<td>Snakeroot</td>
<td>64, 240</td>
</tr>
<tr>
<td>Scotch mint</td>
<td>174</td>
<td>Snakeweed</td>
<td>64</td>
</tr>
<tr>
<td>Scotch spearmint</td>
<td>174</td>
<td>Snapping hazel</td>
<td>136</td>
</tr>
<tr>
<td>Scratchweed</td>
<td>126</td>
<td>Snapping-hazel-nut</td>
<td>136</td>
</tr>
<tr>
<td>Scrofula plant</td>
<td>230</td>
<td>Snowdrop tree</td>
<td>92</td>
</tr>
<tr>
<td>Sealwort</td>
<td>202</td>
<td>Snowflaws</td>
<td>92</td>
</tr>
<tr>
<td>Self-heel</td>
<td>208</td>
<td>Soft deal-pine</td>
<td>194</td>
</tr>
<tr>
<td>Senecaroot</td>
<td>200</td>
<td>Soft elm</td>
<td>260</td>
</tr>
<tr>
<td>Seneca snakeroot</td>
<td>200</td>
<td>Soft pine</td>
<td>194</td>
</tr>
<tr>
<td>Seneca-snakeroot polygala</td>
<td>200</td>
<td>Soldier’s woundwort</td>
<td>30</td>
</tr>
<tr>
<td>Senega</td>
<td>200</td>
<td>Solomon’s seal</td>
<td>202</td>
</tr>
<tr>
<td>Senega root</td>
<td>200</td>
<td>Sour dock</td>
<td>218</td>
</tr>
<tr>
<td>Seneka snakeroot</td>
<td>200</td>
<td>Southern bayberry</td>
<td>180</td>
</tr>
<tr>
<td>Serpentaria</td>
<td>64</td>
<td>Southern bayberry</td>
<td>180</td>
</tr>
<tr>
<td>Serpentine root</td>
<td>64</td>
<td>Southern maidenhair</td>
<td>34</td>
</tr>
<tr>
<td>Sevenbark</td>
<td>142</td>
<td>Southern pine</td>
<td>192</td>
</tr>
<tr>
<td>Shameface</td>
<td>134</td>
<td>Southern pricklyash</td>
<td>278</td>
</tr>
<tr>
<td>Sharplobed liverleaf</td>
<td>140</td>
<td>Southern snakeroot</td>
<td>66</td>
</tr>
<tr>
<td>Sharplobe hepatica</td>
<td>140</td>
<td>Southern wax myrtle</td>
<td>180</td>
</tr>
<tr>
<td>Shavings</td>
<td>92</td>
<td>Southern witch-hazel</td>
<td>136</td>
</tr>
<tr>
<td>Shawnee haw</td>
<td>270</td>
<td>Southern yellow pine</td>
<td>192</td>
</tr>
<tr>
<td>Sheepberry</td>
<td>272</td>
<td>Sow berry</td>
<td>74</td>
</tr>
<tr>
<td>Shellflower</td>
<td>84</td>
<td>Spanish psyllium</td>
<td>196</td>
</tr>
<tr>
<td>Shepherd’s club</td>
<td>264</td>
<td>Spanish tea</td>
<td>86</td>
</tr>
<tr>
<td>Sheroine</td>
<td>214</td>
<td>Spearmint</td>
<td>174</td>
</tr>
<tr>
<td>Shonny</td>
<td>272</td>
<td>Speckled alder</td>
<td>42</td>
</tr>
<tr>
<td>Shonny haw</td>
<td>270</td>
<td>Spiceberry</td>
<td>128, 160</td>
</tr>
<tr>
<td>Shotbush</td>
<td>54</td>
<td>Spice birch</td>
<td>76</td>
</tr>
<tr>
<td>Shrubby fern</td>
<td>102</td>
<td>Spicewash</td>
<td>160</td>
</tr>
<tr>
<td>Shrubby pricklyash</td>
<td>278</td>
<td>Spicy wintergreen</td>
<td>128</td>
</tr>
<tr>
<td>Shrubby-sweet fern</td>
<td>102</td>
<td>Spignet</td>
<td>54, 56</td>
</tr>
<tr>
<td>Shrub yellowroot</td>
<td>274</td>
<td>Spiked maple</td>
<td>28</td>
</tr>
<tr>
<td>Sickleweed</td>
<td>204, 208</td>
<td>Spikenard</td>
<td>54, 56</td>
</tr>
<tr>
<td>Sickletown</td>
<td>208</td>
<td>Spindle tree</td>
<td>116</td>
</tr>
<tr>
<td>Sideflowering skullcap</td>
<td>232</td>
<td>Spleen amaranth</td>
<td>44</td>
</tr>
<tr>
<td>Silkwed</td>
<td>52, 68, 70</td>
<td>Spleen fern</td>
<td>102</td>
</tr>
<tr>
<td>Silky swallow-wort</td>
<td>68</td>
<td>Spleenwort bush</td>
<td>102</td>
</tr>
<tr>
<td>Silver leaf</td>
<td>244</td>
<td>Spleenwort fern</td>
<td>102</td>
</tr>
<tr>
<td>Simpler’s joy</td>
<td>266</td>
<td>Spotted alder</td>
<td>136</td>
</tr>
<tr>
<td>Skewerwood</td>
<td>116</td>
<td>Spotted carduus</td>
<td>98</td>
</tr>
<tr>
<td>Skoke</td>
<td>190</td>
<td>Spotted cranesbill</td>
<td>134</td>
</tr>
<tr>
<td>Skullcap</td>
<td>232</td>
<td>Spotted geranium</td>
<td>134</td>
</tr>
<tr>
<td>Plant Name</td>
<td>Page Numbers</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------</td>
<td>------------------------------</td>
<td></td>
</tr>
<tr>
<td>Spotted pipsissewa</td>
<td>88</td>
<td>Sweet grass</td>
<td></td>
</tr>
<tr>
<td>Spotted thistle</td>
<td>98</td>
<td>Sweet gum</td>
<td></td>
</tr>
<tr>
<td>Spotted wintergreen</td>
<td>88</td>
<td>Sweet haw</td>
<td></td>
</tr>
<tr>
<td>Spreading dogbane</td>
<td>50</td>
<td>Sweet Joe-pyreweed</td>
<td></td>
</tr>
<tr>
<td>Spring cleavers</td>
<td>126</td>
<td>Sweet Myrtle</td>
<td></td>
</tr>
<tr>
<td>Spring wintergreen</td>
<td>128</td>
<td>Sweetroot</td>
<td></td>
</tr>
<tr>
<td>Spruce pine</td>
<td>194, 258</td>
<td>Sweet rush</td>
<td></td>
</tr>
<tr>
<td>Square stalk</td>
<td>230</td>
<td>Sweet sedge</td>
<td></td>
</tr>
<tr>
<td>Squawberry</td>
<td>176</td>
<td>Sweet sugg</td>
<td></td>
</tr>
<tr>
<td>Squaw flower</td>
<td>256</td>
<td>Sweet slumber</td>
<td></td>
</tr>
<tr>
<td>Squaw mint</td>
<td>138</td>
<td>Tachamahac poplar</td>
<td></td>
</tr>
<tr>
<td>Squaw root</td>
<td>78, 96, 256</td>
<td>Tag alder</td>
<td></td>
</tr>
<tr>
<td>Squaw vine</td>
<td>176</td>
<td>Tall boneset</td>
<td></td>
</tr>
<tr>
<td>Squawweed</td>
<td>234</td>
<td>Tallow shrub</td>
<td></td>
</tr>
<tr>
<td>Stagbush</td>
<td>272</td>
<td>Tall speedwell</td>
<td></td>
</tr>
<tr>
<td>Star bloom</td>
<td>240</td>
<td>Tanner's oak</td>
<td></td>
</tr>
<tr>
<td>Startchidget</td>
<td>62</td>
<td>Tansy</td>
<td></td>
</tr>
<tr>
<td>Star leaf gum</td>
<td>40</td>
<td>Tartar root</td>
<td></td>
</tr>
<tr>
<td>Star root</td>
<td>82</td>
<td>Tawny elm</td>
<td></td>
</tr>
<tr>
<td>Starwort</td>
<td>40, 82, 242</td>
<td>Teaberry</td>
<td></td>
</tr>
<tr>
<td>St. Benedict's thistle</td>
<td>98</td>
<td>Teagel</td>
<td></td>
</tr>
<tr>
<td>Stickweed</td>
<td>86</td>
<td>Tetterwort</td>
<td></td>
</tr>
<tr>
<td>Stillingia</td>
<td>244</td>
<td>Texas sarsaparilla</td>
<td></td>
</tr>
<tr>
<td>Stink apple</td>
<td>108</td>
<td>Thick birchwort</td>
<td></td>
</tr>
<tr>
<td>Stinking balm</td>
<td>138</td>
<td>Thickweed</td>
<td></td>
</tr>
<tr>
<td>Stinking Benjamin</td>
<td>256</td>
<td>Thorn apple</td>
<td></td>
</tr>
<tr>
<td>Stinking Christopher</td>
<td>230</td>
<td>Thorough-wax</td>
<td></td>
</tr>
<tr>
<td>Stinking weed</td>
<td>86</td>
<td>Thoroughwort</td>
<td></td>
</tr>
<tr>
<td>Stinkweed</td>
<td>108, 120</td>
<td>Thousand-leaf</td>
<td></td>
</tr>
<tr>
<td>Stinkwort</td>
<td>108</td>
<td>Thousand-leaved clover</td>
<td></td>
</tr>
<tr>
<td>Stitchwort</td>
<td>242</td>
<td>Thousand-seal</td>
<td></td>
</tr>
<tr>
<td>Stone oak</td>
<td>212</td>
<td>Three-leaved nightshade</td>
<td></td>
</tr>
<tr>
<td>Stone root</td>
<td>100</td>
<td>Three-leaved wintergreen</td>
<td></td>
</tr>
<tr>
<td>Storax tree</td>
<td>162</td>
<td>Thrice-leaved arum</td>
<td></td>
</tr>
<tr>
<td>Stork bill</td>
<td>134</td>
<td>Throughstem</td>
<td></td>
</tr>
<tr>
<td>Stramonium</td>
<td>108</td>
<td>Tickweed</td>
<td></td>
</tr>
<tr>
<td>Strawberry</td>
<td>122</td>
<td>Tobacco lobelia</td>
<td></td>
</tr>
<tr>
<td>Strawberry bush</td>
<td>116</td>
<td>Tobacco wood</td>
<td></td>
</tr>
<tr>
<td>Straw-colored gentian</td>
<td>136</td>
<td>Tongue grass</td>
<td></td>
</tr>
<tr>
<td>Striped alder</td>
<td>136</td>
<td>Toothache bush</td>
<td></td>
</tr>
<tr>
<td>Striped gentian</td>
<td>132</td>
<td>Toothache tree</td>
<td></td>
</tr>
<tr>
<td>Styrax</td>
<td>162</td>
<td>276</td>
<td></td>
</tr>
<tr>
<td>Sumac</td>
<td>214</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td>Summer cohosh</td>
<td>94</td>
<td>276</td>
<td></td>
</tr>
<tr>
<td>Swallow wort</td>
<td>70</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td>Swamp alder</td>
<td>42</td>
<td>Tormentil</td>
<td></td>
</tr>
<tr>
<td>Swamp haw</td>
<td>270</td>
<td>Trailing gaultheria</td>
<td></td>
</tr>
<tr>
<td>Swamp hellobore</td>
<td>262</td>
<td>Tread-softly</td>
<td></td>
</tr>
<tr>
<td>Swamp squawweed</td>
<td>234</td>
<td>Triallium</td>
<td></td>
</tr>
<tr>
<td>Swamp turnip</td>
<td>62</td>
<td>True love</td>
<td></td>
</tr>
<tr>
<td>Swamp willow</td>
<td>222</td>
<td>True sage</td>
<td></td>
</tr>
<tr>
<td>Sweating plant</td>
<td>118</td>
<td>True snakehead</td>
<td></td>
</tr>
<tr>
<td>Sweating weed</td>
<td>118</td>
<td>True watercress</td>
<td></td>
</tr>
<tr>
<td>Sweet birch</td>
<td>76</td>
<td>True unicorn root</td>
<td></td>
</tr>
<tr>
<td>Sweet bugleweed</td>
<td>166</td>
<td>Trumpet weed</td>
<td></td>
</tr>
<tr>
<td>Sweet bush</td>
<td>102</td>
<td>Tuber root</td>
<td></td>
</tr>
<tr>
<td>Sweet cane</td>
<td>32</td>
<td>Tuber root</td>
<td></td>
</tr>
<tr>
<td>Sweet cinnamon</td>
<td>32</td>
<td>Tertiary</td>
<td></td>
</tr>
<tr>
<td>Sweet clover</td>
<td>252</td>
<td>Turkey grass</td>
<td></td>
</tr>
<tr>
<td>Sweet elm</td>
<td>260</td>
<td>Turkey pea</td>
<td></td>
</tr>
<tr>
<td>Sweet fern</td>
<td>36, 102</td>
<td>Turpentine pine</td>
<td></td>
</tr>
<tr>
<td>Sweet fern</td>
<td>102</td>
<td>Turtle bloom</td>
<td></td>
</tr>
<tr>
<td>Sweet flag</td>
<td>32</td>
<td>Turtlehead</td>
<td></td>
</tr>
<tr>
<td>Sweet flagroot</td>
<td>32</td>
<td>289</td>
<td></td>
</tr>
<tr>
<td>Plant Name</td>
<td>Page No.</td>
<td>Description</td>
<td>Page No.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------</td>
<td>----------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Twinberry</td>
<td>176</td>
<td>White rod</td>
<td>270</td>
</tr>
<tr>
<td>Twinleaf</td>
<td>146</td>
<td>White root</td>
<td>70</td>
</tr>
<tr>
<td>Two-eyed berry</td>
<td>176</td>
<td>White sassafras</td>
<td>228</td>
</tr>
<tr>
<td>Two-eyed chequer berry</td>
<td>176</td>
<td>White tubergass</td>
<td>40</td>
</tr>
<tr>
<td>Umbrella plant</td>
<td>198</td>
<td>White tuliphead</td>
<td>84</td>
</tr>
<tr>
<td>Uncum</td>
<td>234</td>
<td>White willow</td>
<td>220</td>
</tr>
<tr>
<td>Unicorn plant</td>
<td>40</td>
<td>Whollywort</td>
<td>268</td>
</tr>
<tr>
<td>Unicorn root</td>
<td>40</td>
<td>Wild allspice</td>
<td>160</td>
</tr>
<tr>
<td>Unicorn's horns</td>
<td>40</td>
<td>Wild arsenic</td>
<td>88</td>
</tr>
<tr>
<td>Unstilla</td>
<td>240</td>
<td>Wild ash</td>
<td>238</td>
</tr>
<tr>
<td>Upland sumach</td>
<td>214</td>
<td>Wild beet</td>
<td>44</td>
</tr>
<tr>
<td>Vanilla leaf</td>
<td>254</td>
<td>Wild black cherry</td>
<td>210</td>
</tr>
<tr>
<td>Vanilla plant</td>
<td>254</td>
<td>Wild cherry</td>
<td>210</td>
</tr>
<tr>
<td>Vanilla trilisla</td>
<td>254</td>
<td>Wild cotton</td>
<td>52, 68</td>
</tr>
<tr>
<td>Vegetable antimony</td>
<td>118</td>
<td>Wild craniesbill</td>
<td>144</td>
</tr>
<tr>
<td>Vegetable calomel</td>
<td>198</td>
<td>Wild geranium</td>
<td>134</td>
</tr>
<tr>
<td>Vegetable mercury</td>
<td>198</td>
<td>Wild ginger</td>
<td>66</td>
</tr>
<tr>
<td>Velvet dock</td>
<td>264</td>
<td>Wild hydrangea</td>
<td>142</td>
</tr>
<tr>
<td>Velvet plant</td>
<td>264</td>
<td>Wild hyssop</td>
<td>266</td>
</tr>
<tr>
<td>Venus hair fern</td>
<td>34</td>
<td>Wild indigo</td>
<td>72</td>
</tr>
<tr>
<td>Verbain</td>
<td>266</td>
<td>Wild ippac</td>
<td>50</td>
</tr>
<tr>
<td>Vinegar tree</td>
<td>214</td>
<td>Wild Isaac</td>
<td>118</td>
</tr>
<tr>
<td>Vine maple</td>
<td>170</td>
<td>Wild jadap</td>
<td>198</td>
</tr>
<tr>
<td>Virginia bugleweed</td>
<td>166</td>
<td>Wild jasmine</td>
<td>130</td>
</tr>
<tr>
<td>Virginia cedar</td>
<td>154</td>
<td>Wild lemon</td>
<td>198</td>
</tr>
<tr>
<td>Virginia poke</td>
<td>190</td>
<td>Wild lettuce</td>
<td>156</td>
</tr>
<tr>
<td>Virginia prune bark</td>
<td>210</td>
<td>Wild licorice</td>
<td>54</td>
</tr>
<tr>
<td>Virginian sarsaparilla</td>
<td>54</td>
<td>Wild mandrake</td>
<td>198</td>
</tr>
<tr>
<td>Virginia snakeroot</td>
<td>64</td>
<td>Wild opium</td>
<td>156</td>
</tr>
<tr>
<td>Virginia strawberry</td>
<td>122</td>
<td>Wild orange</td>
<td>278</td>
</tr>
<tr>
<td>Virginia teffrosia</td>
<td>248</td>
<td>Wild sage</td>
<td>118</td>
</tr>
<tr>
<td>Vomitoit</td>
<td>164</td>
<td>Wild snowball</td>
<td>80</td>
</tr>
<tr>
<td>Wahoo</td>
<td>116</td>
<td>Wild sarsaparilla</td>
<td>54</td>
</tr>
<tr>
<td>Wake robin</td>
<td>62, 256</td>
<td>Wild strawberry</td>
<td>122</td>
</tr>
<tr>
<td>Walnut</td>
<td>150</td>
<td>Wild tobacco</td>
<td>164</td>
</tr>
<tr>
<td>Wandering milkweed</td>
<td>50</td>
<td>Wild turmeric</td>
<td>144</td>
</tr>
<tr>
<td>Water bugle</td>
<td>166</td>
<td>Wild turnip</td>
<td>62</td>
</tr>
<tr>
<td>Watercress</td>
<td>182</td>
<td>Wild valerian</td>
<td>234</td>
</tr>
<tr>
<td>Water eryngo</td>
<td>114</td>
<td>Wild wormseed</td>
<td>86</td>
</tr>
<tr>
<td>Water horehound</td>
<td>166</td>
<td>Wild yam</td>
<td>110</td>
</tr>
<tr>
<td>Water pepper</td>
<td>204</td>
<td>Willow</td>
<td>222</td>
</tr>
<tr>
<td>Water smartweed</td>
<td>204</td>
<td>Wind root</td>
<td>70</td>
</tr>
<tr>
<td>Wax berry</td>
<td>180</td>
<td>Wind weed</td>
<td>70</td>
</tr>
<tr>
<td>Wax cluster</td>
<td>128</td>
<td>Wine tree</td>
<td>70, 238</td>
</tr>
<tr>
<td>Wax flower</td>
<td>90</td>
<td>Winterberry</td>
<td>128</td>
</tr>
<tr>
<td>Wax myrtle</td>
<td>180</td>
<td>Winterbloom</td>
<td>136</td>
</tr>
<tr>
<td>Wax weed</td>
<td>234</td>
<td>Winter clover</td>
<td>176</td>
</tr>
<tr>
<td>Weeping spruce</td>
<td>258</td>
<td>Wintergreen</td>
<td>88, 90, 128</td>
</tr>
<tr>
<td>Western wallflower</td>
<td>50</td>
<td>Witch Hazel</td>
<td>136</td>
</tr>
<tr>
<td>Weymouth pine</td>
<td>194</td>
<td>Witchwood</td>
<td>238</td>
</tr>
<tr>
<td>Whicky cherry</td>
<td>210</td>
<td>Wolf foot</td>
<td>166</td>
</tr>
<tr>
<td>White ash</td>
<td>124</td>
<td>Wood betony</td>
<td>166</td>
</tr>
<tr>
<td>White bird's eye</td>
<td>242</td>
<td>Woodbine</td>
<td>130</td>
</tr>
<tr>
<td>White colocroot</td>
<td>40</td>
<td>Wood lily</td>
<td>256</td>
</tr>
<tr>
<td>White fringe</td>
<td>92</td>
<td>Wood sour</td>
<td>74</td>
</tr>
<tr>
<td>White fringe tree</td>
<td>92</td>
<td>Wood tobacco</td>
<td>136</td>
</tr>
<tr>
<td>White hulsebore</td>
<td>136</td>
<td>Womgang</td>
<td>240</td>
</tr>
<tr>
<td>White horahound</td>
<td>168</td>
<td>Wormseed</td>
<td>86</td>
</tr>
<tr>
<td>White horahound</td>
<td>168</td>
<td>Wormseed goosefoot</td>
<td>86</td>
</tr>
<tr>
<td>White oak</td>
<td>212</td>
<td>Yam</td>
<td>110</td>
</tr>
<tr>
<td>White pine</td>
<td>194</td>
<td>Yarrow</td>
<td>30</td>
</tr>
<tr>
<td>White huehouch</td>
<td>168</td>
<td>Yaw root</td>
<td>244</td>
</tr>
<tr>
<td>White pieman</td>
<td>194</td>
<td>Yellowberry</td>
<td>198</td>
</tr>
<tr>
<td>White puceoon</td>
<td>226</td>
<td>Yellow broom</td>
<td>72</td>
</tr>
<tr>
<td>Yellow dock</td>
<td>218</td>
<td>Yellow parilla</td>
<td>170</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----</td>
<td>----------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Yellow eye-wright</td>
<td>144</td>
<td>Yellow pine</td>
<td>192</td>
</tr>
<tr>
<td>Yellow ginseng</td>
<td>78, 96</td>
<td>Yellow puccoon</td>
<td>144</td>
</tr>
<tr>
<td>Yellow Indian shoe</td>
<td>106</td>
<td>Yellow sarsaparilla</td>
<td>170</td>
</tr>
<tr>
<td>Yellow jasmine root</td>
<td>130</td>
<td>Yellowroot</td>
<td></td>
</tr>
<tr>
<td>Yellow jessamine</td>
<td>130</td>
<td>Yellow wild indigo</td>
<td>72</td>
</tr>
<tr>
<td>Yellow lady's slipper</td>
<td>106</td>
<td>Yellow wood</td>
<td>276</td>
</tr>
<tr>
<td>Yellow moccasin</td>
<td>106</td>
<td>Yellowwort</td>
<td>144</td>
</tr>
<tr>
<td>Yellow paintroot</td>
<td>144</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

Special acknowledgment is due to Leo Harvey and Lawrence Harvey, respectively chairman of the board and president of the Harvey Aluminum Company, for providing some of the equipment and supplies used in this research, and for their interest in and encouragement of this work.

The botanical descriptions were reviewed by Dr. Joseph Arditti, Department of Organismic Biology, University of California, Irvine; and Dr. Howard Pfeiffer, Curator of the Herbarium, University of Connecticut, Storrs. Dr. George Hocking, School of Pharmacy of Auburn University, reviewed the use sections and also made helpful suggestions.

Dr. Earl L. Core, West Virginia State University; Dr. James Hardin, North Carolina State University; Miss Mary Ruth Chiles, Great Smoky Mountain National Park, U. S. Department of the Interior; Paul Camplin, Frankfort, Kentucky; and Edward H. Seanlon & Associates, Inc., Olmstead Falls, Ohio, generously provided illustrations used in this manual. The American Museum of Natural History and the Field Museum of Natural History also made their plant photographs available.

Mrs. Marion Sheehan, Gainesville, Florida, created most of the line drawings used in this paper. Mrs. Juanita Huguely, project clerk in the timber related crops project, gave valuable assistance in the preparation of this manual. Miss Karyl Magee, forestry aid on the project, also assisted; and Clyde M. Morris, forestry research technician at Berea, built the drying box.
THE FOREST SERVICE of the U. S. Department of Agriculture is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation.