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AGRICULTURAL RESEARCH  
NORTHEASTERN REGION  
BELTSVILLE AGRICULTURAL RESEARCH CENTER  
BELTSVILLE, MARYLAND 20705

October 31, 1978

Subject: Selected Medicinal Plants for Field Work, 1978-79

To: Arthur S. Barclay

The following references were reviewed:

- Chestnut, V. K. 1902. Plants used by the Indians of Mendecino County, California. Contr. Nat. Herb. 7:295-422.
- Coville, V. 1897. Notes on plants used by the Klamath Indians of Oregon. Contr. Nat. Herb. V:87-108.
- Standley, P. C. 1920-26. Trees and Shrubs of Mexico. Contr. Nat. Herb. 23.
- Train, P., Henrichs, J. R. & Archer, V. A. 1957. Medicinal Uses of Plants by Indian Tribes of Nevada. Contr. toward a flora of Nevada, No. 45 (Revised Edition).

Criteria used to select medicinal plants for field work are:

- I. Combined Therapeutic Uses and Specific Diseases vs. just therapeutic or specific diseases and further weighted on
  - a. Degree of strength. Eg. - antiemetic (Lygodesmia) over laxative
  - b. Internal Diseases or Symptoms - (Lygodesmia - diarrhoea) over external (Zygadenus - swellings)
  - c. Numbers and kinds of uses or descriptions that suggest value.  
Eg. - Lygodesmia for boils or running sores, swellings, anti-emetic and diarrhoea  
Eg. - Enceliopsis - valued highly as an emetic and Indians will travel long distances for a root sample.
- II. Geographical Distribution
  - a. Narrow (Enceliopsis, Lygodesmia) over wide (Aquilegia, Angelica).
  - b. Discontinuous (Enceliopsis) over  $\pm$  Continuous (Larrea tridentata).
- III. Size of Genus - Small (Lygodesmia, Enceliopsis) over large (Ribes, Rosa, Erigeron).

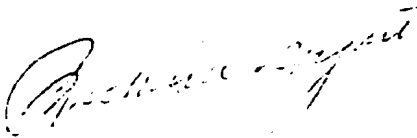
IV. Reinforcement

- a. Species or closely related species cited in more than one reference including Hartwell's "Plants Used Against Cancer" and Krochmal's - A Guide to the Medicinal Plants of the United States.  
Eg. - Sambucus caerulea in Chestnut for emetic, open sores, stomach troubles and "a perfect cure for warts" and a similar (or the same) species listed in Hartwell - as Sambucus canadensis.  
Eg. - Trixis radialis in Standley for sores, venereal diseases and diabetes; also in Hartwell as T. frutescens
- b. More than one species of a genus cited in one or more references.  
Eg. Balsamorhiza ssp. in Train, Angelica ssp. in Train, Hartwell, Krochmal.
- c. Closely related genera in one or more references. Ex. Lygodesmia, Stephanomeria, Crepis & Prenanthes. The first two are in Train and the latter are in Hartwell.

Plants that did not pass Criterium I were not considered further, such as those cited for: colds, fevers, rheumatism, toothaches, headaches, bruises, cuts, insect bites, emmenagogue, tonic, nervous diseases and other uses. Those that passed were then subjectively weighted on the remaining criteria and categorized into high, medium and low priority.

Additionally, medicinal taxa that would have passed were eliminated because of known active agents: Podophyllum peltatum, Bouvardia ternifolia, Caesalpinia pulcherrima, Croton, Euphorbia, Asclepias, Marah, Cucurbita, Rumex and Sambucus. I am in doubt about the last two genera.

Further chemical input is needed to determine whether any of the medicinal taxa listed should be crossed off. Also, I feel the "six plus" guideline should not apply to these taxa.

  
Richard Spjut, Botanist  
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SELECTED MEDICINAL PLANTS FOR FIELD WORK, 1978-79

High Priority

* <i>Angelica</i> spp. (Apiaceae)	rt
<i>Balsamorhiza</i> spp. (Asteraceae)	rt
<i>Castilleja</i> - suffrutescent spp. (Scrophulariaceae)	rt
* <i>Cercocarpus ledifolius</i> (Rosaceae)	sb
* <i>Enceliopsis</i> spp. (Asteraceae)	rt
<i>Epipactis gigantea</i> (Orchidaceae)	pl
* <i>Eriodictyon</i> spp (Hydrophyllaceae)	all parts
* <i>Heuchera</i> spp. (Saxifragaceae)	rt
<i>Holodiscus dumosus</i> (Rosaceae)	rt
<i>Lomatium dissectum</i> var. <i>multifidum</i> (Apiaceae)	rt
<i>Lygodesmia spinosa</i> (Asteraceae)	rt
<i>Osmorhiza occidentalis</i> (Apiaceae)	rt
<i>Petasites palmata</i> (Asteraceae)	all parts
* <i>Psathyrotes ramoisissima</i> (Asteraceae)	pl
<i>Purshia tridentata</i> (Rosaceae) <i>Ac</i>	sb
<i>Sarcobatus vermiculatus</i> (Chenopodiaceae)	pl
<i>Scaevola plumierii</i> (Goodeniaceae)	all parts
<i>Selloa glutinosa</i> (Asteraceae)	all parts
* <i>Sphaeralcea</i> spp. (Malvaceae)	rt
<i>Tetradymia comosa</i> (Asteraceae)	rt
<i>Wyethia longicaulis</i> (Asteraceae)	rt

Medium Priority

* <i>Adenostemma sparsiflorum</i> (Rosaceae)	tw or ws-sb
<i>Alnus rhombifolia</i> (Betulaceae)	sb
<i>Aralia californica</i> (Araliaceae)	all parts
* <i>Arctostaphylos</i> spp. (Ericaceae)	fr
* <i>Berberis</i> spp. (Berberidaceae)	rt
<i>Chrysactina mexicana</i> (Asteraceae)	all parts
<i>Comandra</i> spp. (Santalaceae)	all parts
<i>Erigeron</i> - suffrutescent spp. (Asteraceae)	all parts
<i>Eryngium</i> spp. (Apiaceae)	all parts
<i>Eysenhardtia</i> spp. (Fabaceae)	all parts
<i>Frankenia grandifolia</i> (Frankeniaceae)	all parts
<i>Iris missouriensis</i> (Iridaceae)	rt
* <i>Krameria grayii</i> (Krameriaceae)	rt
<i>Leucocrinum montanum</i> (Amaryllidaceae)	rt
* <i>Leucophyllum</i> spp. (Scrophulariaceae)	all parts
<i>Lippia</i> spp (Verbenaceae)	all parts
<i>Loeselia mexicana</i> (Polemoniaceae)	pl
<i>Mentzelia laevigata</i> (Loasaceae)	pl
<i>Oxyria</i> spp. (Polygonaceae)	all parts

Petiveria alliacea (Phytolaccaceae)	all parts
*Forliveria angustifolia (Zygophyllaceae)	all parts
Trixis radialis (Asteraceae)	all parts
Trichostema lanceolatum (Lamniaceae)	all parts

Low Priority

Aquilegia spp. (Ranunculaceae)	rt
Arenaria spp. (Caryophyllaceae)	pl
Artemisia spinescens (Asteraceae)	st
Buddleia spp. (Loganiaceae)	rt
Clematis spp. (Ranunculaceae)	all parts
Clinopodium laevigatum (Lamniaceae)	all parts
*Eriogonum - suffrutescent spp. (Polygonaceae)	rt
Haematoxylon brasiletto (Fabaceae)	all parts
Helianthemum glomeratum (Asteraceae)	all parts
Heliotropium fruticosum (Boraginaceae)	all parts
Heliotropium parviflorum (Boraginaceae)	all parts
*Hesperocallis spp. (Liliaceae)	bu
Iresine callea (Amaranthaceae)	all parts
Jatropha spp. (Euphorbiaceae)	all parts
Karwinskia humboldtiana (Rhamnaceae)	fr
Mirabilis spp. (Nyctaginaceae)	rt
Pedicularis attolens (Scrophulariaceae)	pl
Phlox longiflora (Polemoniaceae)	rt
Pisonia aculeata (Nyctaginaceae)	all parts
Pisonia capitata (Nyctaginaceae)	all parts
*Pluchea sericea (Asteraceae)	rt
Plumbago scandens (Plumbaginaceae)	pl
*Prenanthes spp. (Asteraceae)	pl
Ribes aureum (Saxifragaceae)	sb
Rosa woodsii (Rosaceae)	rt
Salix spp. (Salicaceae)	sb
Sapium biloculare (Euphorbiaceae)	all parts
Schaefferia frutescens (Celastraceae)	rt
Sophora secundiflora (Fabaceae)	sd
Spiraea spp. (Rosaceae)	all parts
Swietenia spp. (Meliaceae)	all parts
Ungnadia speciosa (Sapindaceae)	all parts
Vitex mollis (Verbenaceae)	all parts
Yucca treculeana (Agavaceae)	all parts

\*Taxa recently sampled