

PHARMACOPÆIAL BOTANIC DRUGS OF THE TWENTIETH
CENTURY.

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The original purpose of preparing a list of botanical drugs that are included in the national pharmacopœias of the world was simply to obtain a check-list for use in the pharmacognosy museum. The list as here presented includes all of the drugs directly derived from plants described in any of the national pharmacopœias * that have been revised since 1900.

There are named in the list 550 pharmacopœial drugs. When it is considered that the pharmacopœias of nineteen countries have been consulted and that these represent the whole modern world, the number of drugs recognized in all, or nearly all, of these pharmacopœias is surprisingly large. Thus 37 of the total of 550 drugs are recognized in each of the pharmacopœias, 19 are included in all but one, 10 are included in all but two and 12 in all but three, while 136 are recognized in but one pharmacopœia and 94 in but two of them. These latter numbers would be smaller but that the new British Pharmacopœia and the Netherlands Pharmacopœia recognize a number of odd Indian and East Indian drugs used in those portions of the world. The drugs that are recognized in all the pharmacopœias are the following:

Anise, Belladonna Leaves, Benzoin, Bitter Orange Peel, Camphor, Cascara Bark, Castor Oil, Cinchona and Red Cinchona, Cloves, Copaiba, Croton Oil, Cubebs, Ergot, Fennel, Foxglove, Gentian, Goldenseal, Gum Arabic, Henbane, Ipecac, Jalap, Male Fern, Nux Vomica, Oil of Anise and Anethol, Oil of Cloves and Eugenol, Oil of Peppermint, Opium, Peru Balsam, Rhubarb, Rosin, Senega, Senna, Squill, Storax, Strophanthus, Sweet Almond, Valerian Root. Those recognized in all but one of the pharmacopœias are Arnica Flowers, Asafoetida, Black Mustard, Cacao Butter, Columbo, Ginger, Linseed, Lycopodium, Myrrh, Oil of Lavender, Oil of Lemon, Olive Oil, Peppermint, Rhatany, Sandalwood Oil, Sarsaparilla, Sweet Almond Oil, Tolu Balsam and Uva Ursi. Those recognized in all but two of the pharmacopœias are Absorbent Cotton, Aloes, Colchicum Seed, Linseed Oil, Lobelia, Manna, Nutmeg, Oil of Rosemary, Oil of Turpentine, and Volatile Oil of Mustard. Those recognized in all but three of the pharmacopœias are Bitter Almond, German Chamomile, Gum Ammoniac, Juniper Berries, Liquid Tar, Marshmallow Root, Pomegranate Bark, Spanish Saffron, Tragacanth, Turpentine, Wormwood and Levant Wormseed. It is of interest to note that six of the above mentioned drugs are not to be recognized in the new United States Pharmacopœia, namely, Bitter Almond, Gum Ammoniac, Juniper Berries, Spanish Saffron, Turpentine and Wormwood.

Of the 230 drugs recognized in but one or two pharmacopœias, 29 are found only in the United States Pharmacopœia, the following being included in both the U. S. P. VIII and IX: Bloodroot, Cottonseed Oil, Malt, Oil of Pimento, Oil of Chenopodium, Pinkroot, Prickly Ash Bark, Sabal, Saigon Cinnamon, Slippery Elm Bark, Stillingia, Yerba Santa. Those found only in the U. S. P. VIII are Blackberry Bark, Boneset, Crampbark, Geranium Root, Cypripedium, Figs, Leptandra, Calendula, Oil of Fleabane, Oil of Pennyroyal, Oil of Wintergreen (as

* From the Mexican Pharmacopœia, which resembles a dispensatory rather than a pharmacopœia, and which contains more than 700 articles of botanic origin, many of them native to Mexico, only those drugs that are also recognized in some other pharmacopœia are here included.

such), Berberis Aquifolium, Pareira, Pipsissewa, Sassafras Pith, Scullcap, Sumach Berries.

The pharmacopœias consulted, with their dates of last revision, are as follows:

Pharmacopœia Austriaca, 8th ed.....	1906
Pharmacopœia Belgica, 4th ed.....	1906
British Pharmacopœia, 5th ed.....	1914
Pharmacopœia Croatico-Slavonica, 2d ed.....	1901
Pharmacopœia Danica, 7th ed.....	1907
Pharmacopœa Francaise, 5th ed.....	1908
Deutsches Arzneibuch, 5th ed.....	1910
Pharmacopœa Hungarica, 3d ed.....	1909
Formacopea ufficiale del Regno d' Italia, 2d ed.....	1902
Pharmacopœia of Japan, English trans., 3d ed.....	1907
Nueva Farmacopea Mexicana, 4th ed.....	1904
Pharmacopœa Nederlandica, 4th ed.....	1905
Pharmacopœa Norvegica, 4th ed.....	1913
Russian Pharmacopœia, 3d ed.....	1910
Pharmacopœia Serbica, 2d ed.....	1908
Farmacopea oficial Espanola, 7th ed.....	1905
Pharmacopœa Suecica, 9th ed.....	1908
Pharmacopœia Helvetica, 4th ed.....	1907
Pharmacopœia of the United States, 8th ed.....	1905
† Pharmacopœia of the United States, 9th ed	1916

† The list of U. S. P. IX drugs was taken from the Abstract of Proposed Changes of the United States Pharmacopœia, ninth revision, vol. iii of the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, and was revised July 1 by Prof. J. P. Remington, Chairman of the Revision Committee. As the work of revision of the pharmacopœia is nearly completed, further changes will probably be very few.

The national pharmacopœias that have not been revised since 1900 and therefore not included in this list are as follows:

Farmacopea Argentina,	1908
Pharmacopœa Fennica, 4th ed.....	1888
Pharmacopœia Graeca, 2d ed.....	
Pharmacopea Portugueza, 1st ed.....	1876
Farmacopea Romana, 3d ed.....	1893
Farmacopea Venezolana,	1900
Farmacopea Chilena,	1886

This list of drugs has been compiled upon the Latin plant names, alphabetically arranged. It was quite out of the question to use the pharmacopœial titles of the drugs, as these varied widely in the different pharmacopœias. Even with the arrangement under plant names several difficulties were encountered. Different names for the same plant are sometimes used in the various pharmacopœias, or the botanical source of a drug may still be in question, or the drug is derived from a number of different species or even genera. However, as this list is not designed to prevent controversies over botanical nomenclature, these difficulties are overcome by arbitrarily using that plant name in the majority.

In all cases the botanical names used in any pharmacopœia but not placed in the alphabetical list have been indicated in footnotes and indexed at the end of the number of the drug.

Key will be added for abbreviations used, at conclusion of article.

22. <i>Alpinia officinarum</i> , rh.	x
23. <i>Aisidium Helminthochortor</i> , th.	x
24. <i>Aistonia constricta</i> , bk.	x
25. <i>Althaea officinalis</i> , lv.	x
26. <i>Althaea officinalis</i> , rt.	x
27. <i>Althaea officinalis</i> , fl.	x
28. <i>Alyxia stellata</i> , bk.	x
29. <i>Anacardium occidentale</i> , lv.	x
30. <i>Anacyclus Pyrethrum</i> , rt.	x
31. <i>Anchusa Italica</i> , fl.	x
32. <i>Andira Araroba</i> .	x
33. <i>Anogeissus latifolia</i> , g. exud.	x
34. <i>Anemone Pulsatilla</i> , fl. hb.	x
35. <i>Angelica archangelica</i> , lv.	x
36. <i>Angelica archangelica</i> , rh. & rt.	x
37. <i>Antennaria dioica</i> , fl. tp.	x
38. <i>Antennaria nobilis</i> , fl. hd.	x
39. <i>Antennaria nobilis</i> , v.o.	x
40. <i>Apium graveolens</i> , rt.	x
41. <i>Apocynum cannabinum</i> , rh. & rt.	x
42. <i>Archidium hypogaea</i> , f.o.	x
43. <i>Archium Lappa</i> , rt.	x
44. <i>Archostaphylos Uva-Ursi</i> , lv.	x
45. <i>Arcia Catechu</i> , s.	x
46. <i>Aristolochia Serpentaria</i> , rh. & rt.	x
47. <i>Artemisia montana</i> , fl. hd.	x
48. <i>Arnica montana</i> , lv.	x
49. <i>Arnica montana</i> , rh. & rt.	x
50. <i>Artemisia Absinthium</i> , fl. hb.	x
51. <i>Artemisia cina</i> , fl. hd.	x
52. <i>Artemisia vulgaris</i> , fl. hb.	x
53. <i>Arundo Donax</i> , rh.	x
54. <i>Asarum Europaeum</i> , rh. & rt.	x
55. <i>Asparagus officinalis</i> , rh. & rt.	x
56. <i>Aspidium Filix-mas</i> , rh.	x
57. <i>Aspidosperma Quebracho-blanco</i> , bk.	x
Galangal.	x
Corsican Moss.	x
Marshmallow Leaves.	x
Marshmallow Root.	x
Marshmallow Flowers.	x
Cashew Leaves.	x
Pellitory Root.	x
Chrysarobin	x
Indian Gum.	x
Pulsatilla	x
Angelica Leaves.	x
Angelica Root.	x
Roman Chamomile.	x
Oil of Roman Chamomile.	x
Celery Root.	x
Canadian Hemp	x
Peanut Oil.	x
Burdock Root.	x
Uva Ursi.	x
Areca Nut.	x
Virginia Serpentaria.	x
Arnica Flowers.	x
Arnica Leaves.	x
Arnica Root.	x
Wormwood.	x
Levant Wormseed.	x
Mugwort Herb.	x
Asparagace.	x
Asparagus Root.	x
Male Fern.	x
Quebracho.	x

? Also see *Pinus* species. No. 386: French from *Picea excelsa*.

Also see *Pinus* species, No. 387.

Also see 1 illus species, No. 381.4
British also from A. decurrens.

German and Japanese from A. sun.

8. Geometria sua juxtaesse iuxta eum.

5. French from *A. pedatum*.††

6. Italian also from *A. aestivalis*, A. a.

8. German, Japanese and Servian from

9. Austrian, Belgian and Hungarian

24. British also from A scholaris.

24: BIRDS also known A. schoutensis.
32: U. S. P. VIII and IX from Vouacapoua Araroba.

32. U. J. VILLALBA
33. Austrian German and Russia

37. French—*Gnaphalium dioicum*

43. Austrian—*Lappa vulgaris*.

44. Austrian—*A. officinalis*.

46. British Mexican and U.S.P., V

root).

51. Danish and U. S. P. VIII—A. P.

Latin plant names	English names	U.S.P. VII
58. <i>Astragalus</i> species, g. exud.	Tragacanth.....	
<i>A. adscendens</i> .		
<i>A. creticus</i> .		
<i>A. gummifer</i> .		
<i>A. versus</i> .		
59. <i>Atropa</i> . Belladonna, lv.	Belladonna Leaves.....	
60. <i>Atropa</i> . Belladonna, rt.	Belladonna Root.....	
61. <i>Barosma betulina</i> , lv.	Buchu.....	
62. <i>Berberis aquifolium</i> , rh. & rt.	Oregon Grape.....	
63. <i>Berberis aristata</i> , st.		
64. <i>Berberis vulgaris</i> , ft.	Barberry.....	
65. <i>Betonica officinalis</i> , hb.		
66. <i>Betula alba</i> , emp. o. fm. wd.	Oleum Rusci.....	
67. <i>Betula lenta</i> , yo. fm. bk.	Oil of Sweet Birch.....	
68. <i>Bidens pilosa</i> , lv.		
69. <i>Bixa Orellana</i> , lv.	Olibanum.....	
70. <i>Blumea balsamifera</i> , lv.		
71. <i>Borrago officinalis</i> , fl.		
72. <i>Boswellia</i> species, g. res.		
B. Bakaw-Dajiana		
B. Carterii.....		
73. <i>Brassica nigra</i> , s.	Black Mustard.....	
74. <i>Brassica nigra</i> , v.o.	Vol. Oil of Mustard.....	
75. <i>Brassica Napus</i> , f. o. fm. s.	Rapeseed Oil.....	
76. <i>Butea Sumatrana</i> , ft.	Bengal Kino.....	
77. <i>Butea frondosa</i> , i. j. fm. st.	Butea Seeds.....	
78. <i>Butea frondosa</i> , s.	Sappan.....	
79. <i>Casuarinia Sappan</i> , ht. wd.	Dragon's Blood.....	
80. <i>Calamantha officinalis</i> , fl. hb.	Marigold.....	
81. <i>Calamus Draco</i> , res. fm. ft.	Sandarac.....	
82. <i>Calendula officinalis</i> , lg. fl.	Elemi.....	
83. <i>Callitris quadrivalvis</i> , res.	Indian Hemp.....	
84. <i>Canarium commune</i> , res.	Hemp Seed.....	
85. <i>Cannabis sativa</i> , fl. tp.	Spanish Pepper.....	
86. <i>Cannabis sativa</i> , fl.		
87. <i>Capsicum annuum</i> , fl.	African Pepper.....	
88. <i>Capsicum fastigiatum</i> , fl.		
89. <i>Carum Carvi</i> , fl.	Caraway.....	

90.	Carum Carvi, v. o. fm. ft.	Oil of Caraway.....
91.	Carum copticum, v. o. fm. ft.	Ajowan Oil.....
92.	Cassia species, If.	Senna.....
	C. acutifolia.	Alexandria Senna.....
	C. angustifolia.	India Senna.....
	C. obovata.	Sudan Senna.....
93.	Cassia acutifolia, ft.	Senna Pods.....
94.	Cassia Fistula, ft.	Cassia Pods.....
95.	Cerasus Juliana, ft.	Sweet Cherry.....
96.	Cerasus caproniana, ft.	Sour Cherry.....
97.	Cetaria Islandica, th.	Iceland Moss.....
98.	Chenopodium ambrosoides, fl. hb. & s.	Mexican Tea.....
99.	Chenopodium anthelminticum, v.o. hb. & s.	Oil of American Wormseed.....
100.	Chimaphila umbellata, lv.	Pipsissewa.....
101.	Chondodendron tomentosum, rt.	Pareira.....
102.	Chondrus crispus, th.	Irish Moss.....
103.	Cibotium Barometz.	Chicory.....
104.	Chichorium Intybus, lv. & rt.	Black Cohosh.....
105.	Cimicifuga racemosa, rh. & rt.	Cinchona.....
106.	Cinchona species, bk.	C. calisaya.....
		C. Ledgeriana.....
		C. officinalis.....
		C. succirubra.....
107.	Cinchona succirubra, bk.	Red Cinchona.....
108.	Cinnamomum Camphora.	Camphor.....
109.	Cinnamomum Cassia, bk.	Chinese Cinnamon.....
110.	Cinnamomum Cassia, v.o.	Oil of Cassia.....
111.	Cinnamomum Oliveri, bk.	Black Sassafras.....
112.	Cinnamomum Zeylanicum, in bk.	Ceylon Cinnamon.....
113.	Cinnamomum Zeylanicum, v. o.	Oil of Cinnamon.....
114.	Cinnamomum species, bk.	Saigon Cinnamon.....
115.	Cistus ladaniferus, res.	Ladanum.....
116.	Citrus Coccothymus, pd. ft.	Coloxyth.....
117.	Citrus Coccothymus, ft. pu.	Coloxyth Pulp.....
118.	Citrus Aurantium, ft. rd.	Sweet Orange.....
119.	Citrus Aurantium, ft. rd.	Sweet Orange Peel.....

61. Japanese—also from *B. crenulata*; U. S. P. IX—also from *B. serratifolia* (Long Buechu).66. Swiss—from *B. pubescens* and *B. verrucosa*.67. U. S. P. IX—named under *Methyl Salicylas*; British—named under *Oleum Gaultheriae*.73. Russian—also from *B. juncea*; Japanese—also from *B. cernua*.74. Danish—also from *B. Rapae juncea*; Spanish—also from “other species.”83. Spanish—from *Juniperus communis*. U. S. P. VIII—*C. Aurantium* var. *dulcis*; U. S. P. IX—*C. sinensis*.84. Netherlands—from *Canarium species*. Belgian, British and Swiss—also from *C. angustifolia*.93. Belgian, British and Swiss—also from *C. angustifolia*.99. U. S. P. IX—from *C. ambrosoides antehelminthicum*.108. Belgian—*Laurus Camphora*.109. Spanish and Mexican *C. aromaticum*.110. Austrian, Norwegian and Swedish—recognize *Cinnamaldehyde* in place of the volatile oil.116. Belgian—*Cucurbita Colocynthis*.118. U. S. P. VIII—*C. Aurantium* var. *dulcis*; U. S. P. IX—*C. sinensis*.

Latin plant names	English names	U.S.P. IX	U.S.P. VIII
120. <i>Citrus Aurantium</i> , v. o.	Oil of Orange.		
121. <i>Citrus vulgaris</i> , ft. ri. ft.	Bitter Orange Peel.		
122. <i>Citrus vulgaris</i> , v. o. fm. ft.	Oil of Orange.		
123. <i>Citrus vulgaris</i> , un. ft.	Orange Berries.		
124. <i>Citrus vulgaris</i> , fl.	Orange Blossom.		
125. <i>Citrus vulgaris</i> , v. o. fm. fl.	Oil of Neroli.		
126. <i>Citrus vulgaris</i> , lv.	Orange Leaves.		
127. <i>Citrus Bergamia</i> , v. o. ri. ft.	Oil of Bergamot.		
128. <i>Citrus Limonum</i> , ft.	Lemon.		
129. <i>Citrus Limonum</i> , ft. ri.	Lemon Peel.		
130. <i>Citrus Limonum</i> , ft. j.	Lemon Juice.		
131. <i>Citrus Limonum</i> , v. o. fm. ft.	Lemon Oil.		
132. <i>Citrus Limonum</i> , s.	Lemon Seed.		
133. <i>Claviceps purpurea</i> , scm.	Ergot.		
134. <i>Cnicus Benedictus</i> , lv. or hb.	Blessed Thistle.		
135. <i>Cochlearia officinalis</i> , fl. hb.	Horseradish Root.		
136. <i>Cocculus nucifera</i> , f. o. s.	Coconut Grass.		
137. <i>Coffea Arabica</i> , s.	Coconut Oil.		
138. <i>Colchicum autumnale</i> , co.	Coffee.		
139. <i>Colchicum autumnale</i> , s.	Cola.		
140. <i>Convallaria majalis</i> , fl. hb.	Colchicum Root.		
141. <i>Convallaria majalis</i> , rh. & rt.	Colchicum Seed.		
142. <i>Commiphora species</i> , g. res.	Myrrh.		
C. Abyssinica.			
C. Myrrha.			
C. Schimperi.			
143. <i>Commiphora Africana</i> , g. res.	Bdellium.		
144. <i>Conium maculatum</i> , fl., hb. or lv.	Poison Hemlock.		
145. <i>Conium maculatum</i> , ft.	Poison Hemlock Seed.		
146. <i>Convallaria majalis</i> , fl.	Lily of the Valley.		
147. <i>Convallaria majalis</i> , fl. hb.	Lily of the Valley.		
148. <i>Convallaria majalis</i> , rh. & rt.	Lily of the Valley.		
149. <i>Convolvulus Scammonium</i> , rt.	Scammony Root.		
150. <i>Convolvulus Scammonium</i> , g. res.	Scammonium.		
151. <i>Convolvulus Scammonium</i> , res.	Scammony Resin.		
152. <i>Copaifera species</i> , olr.	Copaiba.		
C. coriacea.			
C. Guyanensis.			
C. Langsdorffii.			
C. officinalis.			

153.	Copaifera species, v. o.	
154.	Copernicia cerifera, Lv. wax.	
155.	Coptis anemonæfolia, rh.	
156.	Coriandrum sativum, ft.	
157.	Coriandrum sativum, v.o.	
158.	Cotula aurea, fl. hd.	
159.	Crocus sativus, sg.	
160.	Croton Eluteria, bk.	
161.	Croton Tiglium, s.	
162.	Croton Tiglium, f. o.	
163.	Cucurbita Pepo, ft.	
164.	Cucurbita Pepo, s.	
165.	Cuminum Cynimum, ft.	
166.	Cupressus sempervirens, ft.	
167.	Curcuma longa, rh.	
168.	Cyclamen Europicum, rh.	
169.	Cyclamen Europæum, rh.	
170.	Cydonia vulgaris, ft.	
171.	Cydonia vulgaris, s.	
172.	Cymbopogon citratus, v. o.	
173.	Cynanchum Vincentoxicum, rt.	
174.	Cynoglossum officinale, rt.	
175.	Cynoglossum officinale, rt. bk.	
176.	Cypripedium parviflorum, rh. & rt.	
177.	Cytisus Scoparius, fl. tp.	
178.	Daphne Mezereum, bk	
179.	Datura fastuosa, var. alba, lv.	
180.	Datura fastuosa, var. alba, s.	
181.	Datura Stramonium, lv.	
182.	Datura Stramonium, s.	
183.	Delphinium Staphisagria, s.	
184.	Digitalis purpurea, lv.	
185.	Dipterix odorata, s.	
186.	Dorema Ammoniacum, g. res.	
187.	Dorstenia Brasilensis, rt.	
188.	Drimys Winteri var. granatensis, bk.	
189.	Drosera rotundifolia, pl.	
190.	Duboisia myoporoides, lv.	

143

French and Spanish—*Balsamodendron Africana*.

C.

Aurantium.

var.

Bigarde;

British;

German;

Hungarian;

Swiss;

U.S.P.

Copaiba species—

Copaiba.

Mexican and French—

also from

C. maxima.

Spanish—

C. aromatica.

British—

also from

C. flexuosus.

U.S.P. VIII—

also from

C. hirsutum.

179.

British also from

D. Metel.

Japanese—

D. *lataula*.

181.

U.S.P. IX—

also from

D. lataula.

186.

British and German—

also from "other species."

(To be continued.)