

PHARMACOPŒIAL 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, Asafetida, 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:

Pharmacopœa Austriaca, 8th ed.....	1906
Pharmacopœa Belgica, 4th ed.....	1906
British Pharmacopœia, 5th ed.....	1914
Pharmacopœa Croatico-Slavonica, 2d ed.....	1901
Pharmacopœa Danica, 7th ed.....	1907
Pharmacopée 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
Pharmacopœa Serbica, 2d ed.....	1908
Farmacopea oficial Espanola, 7th ed.....	1905
Pharmacopœa Suecica, 9th ed.....	1908
Pharmacopœa 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
Pharmacopœa 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.

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

