

BIBLIOGRAPHY  
OF  
ERICIDICTION CALIFORNICUM BENTHAM

By  
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UNIVERSITY  
SCHOOL OF PHARMACY

A Thesis Submitted for the Degree of  
GRADUATE IN PHARMACY

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Hooker, W. J. ; Arnott, G.A.W. 1841.

*Wigandia Californica* (Hydrophyllanae).

Botany Capt. Beechey's Voyage in HMS Blossan, 1825, 28,  
p. 364, 48 (Pharm. Era 1, p. 59).

An account of the above plant with a plate.

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Bundy, J.H. 1875.

*Yerba Santa*

Eclec. Med. Journ. 35, p. 453. (King's Am. Dispens., 18 ed.  
3 rev., Vol. I, p. 727; Eclec. Med. Journ., 35, p. 530;  
Eclec. Med. Journ. 35, p. 558; Lloyd, Orig. & Hist. of all  
Pharm. Veg. Drugs Chem. & preps., Vol. 1, p. 132; Eclec.  
Med. Journ. 36, p. 150.)

He gives a description and its use in specific cases  
of Yerba Santa.

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McIntyre, W. 1875.

Minutes of the Pharmaceutical Meeting.

Am. Jour. Pharm., 47, p. 279.

Nees donates a specimen of *Eriodictyon glutinosum*  
to the botanical cabinet of the Philadelphia College of  
Pharmacy.

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Holmes, E. M. 1876.

*Eriodictyon Californicum*, Benth.

Pharm. Journ. 35, p. 781. (New Remedies 5, p. 136; New  
Remedies 6, p. 169.)

A general article on *Eriodictyon Californicum* with  
reference to the work of other men.

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Lloyd, C.G. 1876.

*Eriodictyon Glutinosum*.

Eclectic Med. Journ. 36, p. 150. (Lloyd, Orig. & Hist.  
Pharm. Veg. Drugs, Chem. & preps., V. 1, p. 132).

It contains three references together with a suggestion concerning the name of *Eriodictyon glutinosum*.

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Wellcome, F.S.

1876.

*Eriodictyon Californicum*.

The Pharmacist 9, p. 33. (Am. Journ. Pharm. 48, p. 91; Proc. Am. Pharm. Assoc., 24, p. 134; Natl. Dispens. 3 ed., p. 587; King's Am. Dispens. 18 ed., 3 rev., V. 1, p. 727; Jahrb. f. Pharm. 36, p. 159; U.S. Dispens. 17 ed., p. 513; U.S. Dispens. 20 ed., p. 429; Lloyd, Orig. & Hist. Pharm. Veget. Drugs Chem. & preps., V. 1, p. 132; Trans. Chem. Soc. 91, p. 887).

In a paper read before the New York Alumni Association of the Philadelphia Alumni Association, January 4, he gives a plate together with a detailed description, constituents, and uses of *Eriodictyon glutinosum*.

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(Editor)

1877.

*Eriodictyon Californicum*.

New Remedies v. 6, p. 169.

A general article giving the botany, habitat, synonymy, constituents, and preparations of *Eriodictyon*.

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(Editor)

1877.

*Yerba Santa*.

Am. Journ. Pharm. 49, p. 134.

The use of *Yerba Santa* in bronchitis and the preparation of it are given.

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Gabel, ---

1877.

*Yerba Santa*.

Eclic. Med. Journ. 37, p. 65.

He reports cases in which *Yerba Santa* was used with success.

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Parke, Davis & Co.

1877-8.

Preparations of Eriodictyon.

New Preparations, \_\_, p. \_\_. (Lloyd, Orig. & Hist. Pharm. Veget. Drugs, Chem. & Preps., v. 1, p. 132.)

An announcement of new pharmaceutical preparations of Eriodictyon and their uses.

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Gray, A.

1878.

Eriodictyon Glutinosum.

Synoptical Flora of North America v. 2, p. 176. (Trans. Chem. Soc. 91, p. 887.)

A systematic description of the plant.

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Palmer, E.

1878.

Eriodictyon Glutinosum. Yerba Santa.

The Am. Naturalist, \_\_, p. \_\_. (Am. Journ. Pharm. 50, p. 590.)

The uses of the decoction and leaves of Eriodictyon glutinosum are discussed.

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Alleman, E.A.

1879.

Eriodictyon Glutinosum.

Thesis - Phila. College of Pharmacy. (First Cent. Phila. College of Pharmacy, p. 498).

The original was not available.

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(Editor)

1879.

Novelties.

New Remedies, 8, p. 149.

It mentions the fluidextract of Yerba Santa with doubt as to its effectiveness.

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(Editor)

1879.

Syrup of Yerba Santa and Tincture of Yerba Santa.

Drug. Circ. 29, p. 75.

Formulas for the preparation of Syrup and Tincture of Yerba Santa are outlined in reply to a query by F.W.F.

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Kier, F.M.

1879.

Yerba Santa (*Eriodictyon Californicum*).

Pacific Med. & Surg. Jour., p. \_\_\_. (Am. Journ. Pharm. 51, p. 258; New Remedies 8, p. 341; Pharm. Era 1, p. 59; U.S. Dispens. 17 ed., p. 513).

He tells of Yerba Santa as a means of disguising the taste of quinia.

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McLaughlin, W.H.

1879.

*Eriodictyon Glutinosum* (Yerba Santa).

Drug. Circ. 23, p. 57.

The description, habitat, uses, collection and constituents of *Eriodictyon Glutinosum* are given.

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Mohr, C.

1879.

On *Eriodictyon Californicum* (Yerba Santa).

Proc. Am. Pharm. Assoc. 27, p. 736. (Am. Journ. Pharm. 51, p. 512 & 545; New Remedies 9, p. 22; New Remedies 12, p. 20; U.S. Dispens. 17 ed., p. 513; King's Am. Dispens. 18 ed., 3 rev., v. 1, p. 727; U.S. Dispens. 20 ed., p. 429; Pharm. Era 1, p. 59; Trans. Chem. Soc. 91, p. 887; Drug. Circ. 23, p. 171).

He makes a qualitative and quantitative analysis of *Eriodictyon Californicum*.

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Rothrock, J.T. 1879.

Notes on Economic Botany of Western United States.  
New Remedies 8, p. 234.

He mentions Eriodictyon being used as a panacea by natives, but that the exact value is as yet unknown.

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Steele, J.G. 1879.

Report on Drug Market of San Francisco.  
Proc. Am. Pharm. Assoc. 27, p. 613.

The habitat, uses and administration of Yerba Santa are reported on.

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Wilson, J.C. 1879.

Yerba Santa in Catarrhal Affections of the Upper Air Passages.  
Med. & Surg. Rep., Phila., 41, p. 377. (S.G.I. Index, S. 1, v. 16, p. 735; Drugg. Circ. 24, p. 37.)

The description, preparations and results from the use of Yerba Santa, a new drug, are discussed.

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(Editor) 1880.

Elixir of Yerba Santa.  
Drug. Circ. 24, p. 169. (Drug. Circ. 27, p. 153; Drug. Circ. 28, p. 122.)

A formula for the preparation of Elixir of Yerba Santa is given.

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Holzhauser, W.C. 1880.

Eriodictyon Californicum.  
Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 502; Am. J. Pharm. 52, p. 404; Wehmer, Die Pflanzenstoffe, p. 642; Proc. Am. Pharm. Assn., 29, p. 141).

A detailed account of the constituents of Eriodictyon Californicum.

Miller, W.C. 1880.

*Eriodictyon Glutinosum.*

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 503.)

(The original was not available.)

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Peters, H.E. 1880.

*Eriodictyon Californicum.*

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 503.)

(The original was not available.)

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Salomon, L.F. 1881-2.

Report on Yerba Santa.

New Orleans Med. & Surg. Jour. 9, p. 357. (S.G.L. Index, S.1, v. 16, p. 735.)

(The original was not available.)

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(Editor) 1883.

Yerba Santa & Quinine.

Drugg. Circ. 27, p. 120.

The use of Yerba Santa for disguising the taste of quinine is discussed.

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(Editor) 1883.

Yerba Santa.

Drugg. Circ. 27, p. 153.

A suggestion for the preparation of syrup of Yerba Santa.

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Kindig, R. 1883.

Eriodictyon.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 512.)

(The original was not available.)

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Lilly, J.K. 1883.

Eriodictyon Glutinosum as a Disguise for the Taste of Quinine.

Chi. Med. Rev., \_\_, p. \_\_. (New Remedies, 12, p. 20.)

A formula for a syrup of Verba Santa to be used in disguising the taste of quinine is given.

---

Moeller, J. 1883.

Eriodictyon Californicum. Benth.

Pharm. Centrbl., 24, p. 217. (Am. Jour. Pharm., 55, p. 568; Zeit. Allg. Apoth. Ver., 45, p. 135; Dragendorff, Die Heilpflanzen, p. 601.)

A microscopical description of Eriodictyon Californicum leaves. Two plates are given.

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Thal, R. 1883.

Erneute Untersuchungen ueber zusammensetzung und Spaltungsproducte des Ericolins und ueber seine Verbreitung in der Familie der Ericaceen nebst einem Anhang ueber die Leditannsaure, die Callutannsaure und das Pinipikrin.

Pharm. Zeit. Russl., 22, p. 258. (U.S. Dispens. 17 ed., p. 513; ibid., 20 ed., p. 429; Natl. Dispens., 3 ed., p. 587; ibid., 5 ed., p. 623; Trans. Chem. Soc., 91, p. 887.)

Fe determines the presence of ericolin in Eriodictyon Glutinosum.

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Briggs, M.A. 1884.

Eriodictyon Californicum.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm. p. 515).

(The original was not available.)

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(Editor) 1884.

Seasonable Formulae.

The Druggist, 6, p. 7. (West. Drugg. 10, p. 368.)

Gives a formula for the preparation of a Yerba Santa Cough Mixture.

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Lloyd, J.U. 1884.

Compound Elixir of Yerba Santa.

"Elixirs". (Drugg. Circ., 28, p. 122.)

A formula for preparation of Compound Elixir of Yerba Santa is discussed.

---

Stilli, A., Maisch, J.M. 1884.

Eriodictyon. Mountain-Balm.

National Dispens., 3 ed., p. 586.

The synonyms, origin, description, constituents, pharmaceutical uses, medical action and uses of Eriodictyon are listed.

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Kirk, G.F. 1885.

Eriodictyon Californicum.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 520.)

(The original was not available.)

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Com. on Natl. Form. 1886.

Syrupus Eriodictyi Aromaticus.

Proc. Am. Pharm. Assoc., 34, p. 266. (West. Drugg. 9, p. 358.)

A detailed formula for the preparation of Aromatic Syrup of Eriodictyon together with a formula for the preparation of Compound Elixir of Yerba Santa.

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(Editor) 1886.

Syrup of Yerba Santa.

West. Drugg., 8, p. 340. (West. Drugg. 9, p. 358.)

The Editor gives a formula for the preparation of a syrup of Yerba Santa.

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(Editor) 1886.

Syrupus Corrigenis.

Ann. Drugg., 15, p. 219.

He answers a query as to a preparation called "Syrupus Corrigenis".

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(Editor) 1886.

Syrup of Yerba Santa. Tincture of Yerba Santa.

Drugg. Circ., 30, p. 16.

Formulas for the preparation of Syrup of Yerba Santa and Tincture of Yerba Santa are given.

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Hartz, J.D.A. 1886.

Yerba Santa as a Vehicle for Quinine.

Drugg. Circ. 30, p. 92. (Pharm. Era, 1, p. 60; Pharm. Rec., 6, p. 75; Am. Drugg., 15, p. 41; *ibid.*, 15, p. 219; West. Drugg., 8, p. 270; *ibid.*, 9, p. 358.)

A detailed process of the preparation of "Syrupus Corrigenis" for use in disguising the taste of quinine.

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Kiser, T. J. 1886.

Eriodictyon Californicum.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 524.)

(The original was not available.)

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Munson, J.H. 1886.

Preparations of Yerba Santa.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 525.)

(The original was not available.)

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Rother, R. 1886.

Some Alkaline Extractions.

Drug. Circ., 30, p. 4. (West. Drugg., 8, p. 13; West. Drugg., 8, p. 340; West. Drugg., 9, p. 358; Zeit. Allg. Apoth. Ver., 45, p. 135.)

A formula for preparing Syrup of Yerba Santa as a vehicle for disguising the taste of quinine is given. He also gives a formula for preparing Yerba Santa tincture of Cinchona.

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Rother, R. 1886.

Adjuvant Syrups.

Drugg. Circ. 30, p. 172. (Drugg. Circ. 32, p. 39.)

A formula for the preparation of a Syrup of Yerba Santa is given.

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Dupont, R.S. 1887.

Analysis of Yerba Santa.

Proc. Mich. Pharm. Assoc., 5, p. 189. (Pharm. Era 1, p. 403; Proc. Am. Pharm. Assoc., 36, p. 328.)

A detailed analysis of the leaves of Yerba Santa.

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(Editor)

1887.

Eriodictyon Glutinosum.

Pharm. Era, 1, p. 59. (Jahrb. f. Pharm., 22, p. 87; Pharm. Post, 20, p. 737; Der Fortschritt 22, p. 383.)

• The article gives the botany (Wheeler, C.F.), microscopy (Manton, W.P.), medicinal use, chemistry, pharmacy and preparations of Eriodictyon glutinosum. A plate is also given.

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Quirini, A.

1887.

Ueber Eriodyctionsäure.

Ztschr. d. Allg. Oesterr. Apoth. Ver., 25, p. 404. (Ztschr. d. Allg. Oesterr. Apoth. Ver., 26, p. 159; Jahrb. f. Pharm., 22, p. 87; Der Fortschritt 18, p. 303; Pharm. Post 20, p. 818; (Dragendorff) p. \_\_\_. Die Heilpflanzen. Trans. Chem. Soc., 91, p. 887.)

A chemical examination of Eriodyction Californicum.

---

Rother, R.

1887.

Some Constituents of Yerba Santa.

Am. Jour. Pharm., 59, p. 225. (U.S. Dispens., 17 ed., p. 513; Jahrb. f. Pharm., 22, p. 87; Pharm. Post, 20, p. 416; Trans. Chem. Soc., 91, p. 887.)

An article on the various constituents of Yerba Santa.

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Steele, J.G.

1887.

Yerba Santa.

Pacific Record \_\_, p. \_\_. (Pharm. Rec., 7, p. 139.)

A lengthy general article on Yerba Santa is given.

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V. \_\_ \_\_

1887.

Syrup of Yerba Santa.

West. Drugg., 9, p. 314.

The article describes preparation of a syrup of Yerba Santa with an alkali.

Welliver, R.F. 1887.

Eriodictyon Glutinosum.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 530.)

(The original was not available.)

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Dupont, R.S. 1888.

Proximate Examination of Yerba Santa.

Proc. Am. Pharm. Assoc., 36, p. 328.

An examination of Yerba Santa listing the constituents found.

---

(Editor) 1888.

Menstrua for Fluidextracts.

Drug. Circ., 32, p. 16.

An article on two possible menstruums for preparing fluidextract of Yerba Santa.

---

Johnson, E.Y. 1888.

A New Formula for Aromatic Syrup of Yerba Santa.

Drugg. Circ., 32, p. 78. (Drugg. Circ. 36, p. 110.)

The author gives a detailed formula for the preparation of an aromatic syrup of Yerba Santa for use in disguising the taste of quinine.

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Lenhardt, O.F. 1888.

Eriodictyon Californicum.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm. p. 532; Am. Jour. Pharm. 61, p. 70; Dragendorff, Die Heilpflanzen, p. 601; Proc. Am. Pharm. Assoc., 37, p. 442.)

An examination of Eriodictyon with regard to its constituents.

---

Quirini, A. 1888.

Ueber Eriodyction glutinosum und Eriodyctionsäure.

Zeitschr. d. Allg. Oest. Apt. Ver., 26, p. 159. (West. Drugg., 10, p. 171; Wehmer, Die Pflanzenstoffe, p. 642; Natl. Dispens., 5 ed., p. 623; Trans. Chem. Soc., 91, p. 887.)

He gives the name Eriodyctionic acid to the substance received by treating the extract with boiling water.

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(Editor) 1889.

Yerba Santa.

West. Drugg., 11, p. 177.

The editor refers a query to the National Formulary.

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(Editor) 1889.

Yerba Santa Cough Mixture.

West. Drugg., 11, p. 376.

The editor gives a formula for the preparation of Yerba Santa Cough Mixture.

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Guthrie, D.C. 1889.

Syrup of Yerba Santa.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 535).

(The original was not available.)

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Cleveland, F.C. 1890.

Yerba Santa.

Thesis - Buffalo Coll. Pharm. (Pharm. Jour., 50, p. 540; West. Drugg., 12, p. 363.)

He describes several preparations and gives the constituents of Yerba Santa.

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O'Connor, J.T. 1890.

Eriodictyon Californicum.

Am. Homeo. Pharmac., 4 ed., p. 212.

The synonyms, natural order, common names, description, introduction and preparation of Eriodictyon are given.

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Pease, G.M. 1890.

Eriodictyon Californicum.

Am. Homeo. Pharmac., 4 ed., p. 212.

Pease introduces Eriodictyon to the homeopathic profession.

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Ross, E. J. 1890.

Eriodictyon Glutinosum.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 542.)

(The original was not available.)

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Sheafer, E.P. 1890.

Yerba Santa.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 542.)

(The original was not available.)

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Cleveland, H.C. 1891.

Proximate Examination of Yerba Santa.

Proc. Am. Pharm. Assoc., 39, p. 390.

An analysis of Eriodictyon Californicum.

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(Editor) 1892.

Yerba Santa.

Pharm. Era, 8, p. 364.

He compiles four formulas for the preparation of Yerba Santa giving credit to Fallberg, Detroit Pharm. Assoc., and Rother.

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(Editor) 1892.

Syrup of Yerba Santa.

Pharm. Era 8, p. 174.

An answer to a query on the N.F. Syrup of Yerba Santa.

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(Editor) 1892.

Quinine with Yerba Santa.

Drugg. Circ., 36, p. 206.

A discussion of a prescription containing quinine with Yerba Santa.

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O'Brien, W.J. 1892.

Yerba Santa.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 551.)

(The original was not available.)

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Edel, F. 1894.

Some Suggestions Regarding Revision of National Formulary.

Drugg. Circ., 38, p. 3. (Merck's Report 3, p. 43.)

He offers a glycerate to be used in preparing syrup of Yerba Santa.

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(Editor) 1894.

Botany.

Merck's Report 3, p. 210.

Contains a description of Yerba Santa from a botanical standpoint.

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(Editor) 1894.

Miscellaneous Formulas.

Drugg. Circ., 38, p. 8.

The author gives a formula for the preparation of an aromatic syrup of Yerba Santa.

---

(Editor) 1894.

Answers to Correspondents.

Merck's Report 3, p. 267.

An answer to a query on Eriodictyon.

---

Ferrein, A. 1894.

Yerba Santa (Eriodictyon Californicum).

Pharm. Post, 27, p. 106. (Proc. Am. Pharm. Assoc., 42, p. 892.)

He studied the drug, primarily from the anatomical and histological standpoints. He includes 16 plates with his results.

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Jackel, J.O. 1894.

Eldext. of Yerba Santa.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 560.)

(The original was not available.)

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Joslin, E.

1894.

Gathered Formulas.

Merck's Report 3, p. 270.

He gives a formula for the preparation of Compound Elixir of Yerba Santa.

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Lewin, L.

1894.

Ueber die Geschmackverbesserung von Medicamenten und ueber Saturationem.

Berlin Klin. Wochenschr. 31, p. 644.

He recommends the use of the fluidextract and of the syrup of Eriodictyon for disguising the taste of bitter remedies, especially quinine.

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Stille, A.; Maisch, J.M.; Caspari, C.; Maisch, F.C. 1894.

Eriodictyon, U.S. - Mountain Balm.

Natl. Dispens., 5 ed., p. 623.

The synonyms, origin, description, constituents, pharmaceutical uses and action of Eriodictyon.

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Swayze, B.W.

1894.

Colds.

Drugg. Circ., 38, p. 40.

Syrup of Yerba Santa is included in a formula for the relief of colds.

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Wood, F.C., Remington, J.P. & Sadtler, S.P.

1894.

Eriodictyon.

U.S. Dispens., 17 ed., p. 513.

The synonyms, description of varieties, description of leaf and medicinal properties of Eriodictyon are given.

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Bocquillon, M.H. 1895.

Extract Content of Some New Drugs.

Am. Drugg. & Pharm. Rec., 27, p. 68.

An article on the aqueous extract content of Eriodictyon glutinosum.

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Ritter, F.W. 1895.

Eriodictyon Glutinosum.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 567; Am. Jour. Pharm., 67, p. 565; Proc. Am. Pharm. Assoc., 44, p. 553; U.S. Dispens., 20 ed., p. 428; Zeitschr. d. Allg. Apoth.-Ver., 45, p. 135.)

A very complete discussion of Eriodictyon Glutinosum accompanied by eight plates.

---

(Editor) 1896.

Quinine & Syrup Yerba Santa.

Am. Drugg. & Pharm. Rec., 28, p. 156.

He answers a query on a prescription of quinine sulphate and syrup of Yerba Santa.

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Huber, J.E. 1896.

Aromatic Syrup of Yerba Santa.

Proc. Ill. Pharm. Assoc., 17, p. 84. (Drugg. Circ., 41, p. 194.)

A formula and directions for making an aromatic syrup which has advantages over the N.F. product.

---

Dragendorff, G. 1898.

Eriodictyon crassifolium.

Die Heilpflanzen, p. 601.

He gives synonymy, use, medicinal and therapeutical properties of Eriodictyon crassifolium.

---

Felter, H.W. & Lloyd, J.U. 1898.

Eriodictyon (U.S.P.) - Eriodictyon.

King's Am. Dispens., 18 ed., 3 rev., v. 1, p. 727.

The definition, natural order, common names, illustrations, botanical history and source, history, description, chemical composition, action, medical uses, dosage, specific indications and uses of Eriodictyon are given.

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Bloyer, W.E. 1901.

Eriodictyon Glutinosum.

Eclec. Med. Journ., 61, p. 164.

A general article on Yerba Santa.

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Fleming, S.C. 1901.

Eriodictyon.

Thesis - Phila. Coll. Pharm. (First Cent. Phila. Coll. Pharm., p. 586.)

(The original was not available.)

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Brueckner, Lampe & Co. 1903.

New Preparations.

Pharm. Centrbl. 44, p. 439. (Zeit. d. Allg. Oesterr. Apoth. Ver., 45, p. 135.)

The fluidextract is mentioned together with its uses.

---

(Editor) 1903.

Syrup of Yerba Santa.

West. Drugg., 25, p. 440.

A formula for the preparation of syrup of Yerba Santa is given.

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Richtmann, W. C. 1903.

Crude Drugs & Chem. of U.S.P. (1890) and Preps. into Which They Enter.

Pharm. Arch., 5, p. 45.

A list of the official preparations of Eriodictyon in the U.S.P. 1890.

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(Editor) 1904.

Aromatic Syrup of Yerba Santa.

West. Drugg., 26, p. 685.

A formula for the preparation of Aromatic Syrup of Yerba Santa is given.

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Meyer, G. 1905.

Syrupus Eriodictyonis ein neues Geschmackekorrigens.

Pharm. Ztg., 50, p. 870. (U.S. Dispens., 20 ed., p. 429; Dig. Com. on U.S.P. 1905, p. 168.)

He recommends the syrup for use in disguising the taste of bitter remedies.

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Cadwell, P. 1906.

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Drugg. Circ., 50, p. 159. (Dig. Com. U.S.P., 1906, p. 276.)

He tells how to prepare a clear aromatic syrup of Yerba Santa.

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Cadwell, P. 1906.

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Drugg. Circ., 50, p. 392. (Dig. Com. U.S.P., 1906, p. 276.)

He says that the aromatic syrup has displaced the aromatic elixir in use as a vehicle.

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Fenkel, Alice

1906.

*Eriodictyon Californicum* (E. & A.) Greene.

Wild Medicinal Plants of the U.S., p. 28. (Dig. Com. U.S.P., 1906, p. 276.)

She discusses synonyms, description, habitat, part used and Latin names of *Eriodictyon*.

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Power, F.B. & Tutin, F.

1906.

Chem. Exam. of *Eriodictyon*.

Proc. Am. Pharm. Assoc., 54, p. 352. (Dig. Com. on U.S.P., 1906, p. 276; Am. Jour. Pharm. 78, p. 488; Pharm. Zentrbl., 61, p. 34; Trans. Chem. Soc., 91, p. 887; Trans. Chem. Soc., 96, p. 81; Trans. Chem. Soc., 97, p. 2054; Pharm. Jour., 77, p. 381; Drugg. Circ., 53, p. 230.)

The authors give the history and chemical examination of *Eriodictyon* in a long and detailed article.

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Schneider, A.

1906.

Medicinal Plants of California Indians.

Merck's Report, 15, p. 95. (Dig. Com. on U.S.P., 1906, p. 276.)

He mentions that the Indians and whites consider it a valuable remedy for certain ailments.

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Massler, G.

1907.

Chemische Untersuchung von *Eriodictyon Glutinosum*.

Liebig's Ann. d. Chem. 351, p. 233. (Apoth. Ztg., 22, p. 191; Trans. Chem. Soc., 91, p. 890; *ibid.* 97, p. 2056; Die Pflanzenstoffe (Wehmer), p. 642; Proc. Am. Pharm. Assoc. 55, p. 774; Ztschr. d. allg. oesterr. Apoth. Ver. 45, pp. 135, 147 & 163; Dig. Com. U.S.P. 1907, p. 242; Schweiz. Wehnschr. f. Chem. u. Pharm. 45, p. 282; Sitzungber K. Akad. Wiss. Wein. 116, p. \_\_\_.

He makes an extensive chemical examination of *Eriodictyon* and gives his results with formulas.

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Power, F.B. & Tutin, F.

1907.

The Constitution of Homeoeriodictyol.

Jour. Chem. Soc., Lond. 91, p. 887. (Wehmer, Die Pflanzenstoffe, p. 642; Dig. Com. U.S.P., 1907, p. 242; Trans. Chem. Soc., 95, p. 81.)

A complete chemical analysis and investigation of the substance with structural formula.

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1908.

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Domestic & Veterinary Remedies, p. \_\_. (West. Drugg., 30, p. 718.)

A formula for the preparation of Yerba Santa cough mixture.

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Mossler, G.

1908.

Ueber die Chemische Untersuchung von Eriodictyon Glutinosum.

Ztschr. d. allg. Oesterr. Apoth. Ver., 46, pp. 177 and 191. (Dig. Com. U.S.P., 1908, p. 263.)

Mossler gives an extensive chemical examination of Eriodictyon glutinosum and includes some chemical formulae.

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Schneider, A.

1908-9.

Eriodictyon.

Pacif. Pharm., 2, p. 84. (Dig. Com. U.S.P., 1908, p. 263.)

He tells of the popularity and uses of Eriodictyon californicum.

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Tunmann, O.

1908.

Mikroskopisch Pharmakognostische Beiträge zur Kenntnis einiger Neuerer Arzneidrogen.

Pharm. Zentralh., 49, p. 459. (Dig. Com. U.S.P., 1908, p. 263; U.S. Dispens., 20 ed., p. 429.)

He gives a detailed description of the plant with four plates.

Beringer, G. M. 1909.

Alkaline Fluidglycerates.

Am. Jour. Pharm., 81, p. 479. (Proc. Am. Pharm. Assoc., 57, p. 1013; Dig. Com. U.S.P., 1909, p. 369; Proc. Am. Pharm. Assoc., 57, p. 812.)

He gives the formula method of preparation and uses of Eriodictyon Fluidglycerate.

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Diehl, C.L. 1909.

Preparations.

Proc. Am. Pharm. Assoc., 57, p. 1086. (Dig. Com. U.S.P., 1909, p. 369.)

He suggests some changes in the formula for Syrupi Eriodictyi Aromaticum.

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(Editor) 1909.

Answers to Queries.

Merck's Report 18, p. 331.

A formula for the preparation of an aromatic fluid-extract of Yerba Santa.

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Schneider, A. 1909-10

Drug Plants Which Can be Grown in California.

Pacif. Pharm., 3, p. 192. (Dig. Com. U.S.P., 1909, p. 368.)

He tells that Eriodictyon could be grown on hillside lands.

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Taylor, A.C. 1909.

Supernumerary Formulas of the N.F.

Pharm. Era, 41, p. 494. (Dig. Com. U.S.P., 1909, p. 368.)

He discusses briefly the aromatic syrup and aromatic elixir of Yerba Santa.

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Tutin, F. & Clewer, F.W.B. 1909.

Chemical Examination of Eriodictyon.

Jour. Chem. Soc., 95, p. 81. (Dig. Com. U.S.P., 1909, p. 368; Drugg. Circ., 53, p. 230; Trans. Chem. Soc., 97, p. 2058; Wehmer, Die Pflanzenstoffe, p. 642.)

A thorough chemical research of Eriodictyon with structural formulas of some of the compounds.

---

Forbes, J.W. 1910.

The Introduction of Yerba Santa and Cascara Sagrada.

South. Pharm. Jour., 1, p. 476.

A sketch of the introduction of tar-weed to the public.

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Gane, E.H. 1910.

Pharmacopoeial Notes and Comments.

Drug Topics, 25, p. 228. (Dig. Com. U.S.P., 1910, p. 448.)

With regard to Eriodictyon, he states that the synonym Yerba Santa should be added.

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Hommell, P.E. 1910.

Pharmacopoeial Criticism's and Suggestions.

Merck's Report 19, p. 122. (Dig. Com. U.S.P., 1910, p. 448.)

He suggests that Aromatic Syrup of Eriodictyon be in the U.S.P. instead of the N.F.

---

Kebler, L.F. 1910.

Examination of Crude Drugs.

Proc. Maryland Pharm. Assn., 28, p. 117. (Dig. Com. U.S.P., 1910, p. 448.)

He criticizes the definition of Eriodictyon as given in the U.S.P.

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Schneider, A. 1910.

Microscopical Examination of Drugs, Foods and Textile Fabrics.

Merck's Report 19, p. 191. (Dig. Com. U.S.P., 1910, p. 448.)

He gives the characteristics of powdered Eriodictyon leaves.

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Tutin, F. 1910.

The Constitution of Eriodictyol of Homeoeriodictyol and of Hesperitin.

Journ. Chem. Soc., 97, p. 2054. (Dig. Com. U.S.P., 1910, p. 448.)

An extensive chemical examination of the substances mentioned.

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Fenkel, Alice 1911.

Yerba Santa.

Bull. Bur. Plant Ind. U.S. Dept. Agr., No. 219, p. 15. (Dig. Com. U.S.P., 1911, p. 346.)

A detailed article on Yerba Santa with one plate.

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Fenkel, Alice 1911.

Eriodictyon Californicum (H. & A.) Greene.

American Medicinal Leaves and Herbs, p. 14.

She gives the Pharmacopoeial name, synonym, common names, description, collection, price and uses of Eriodictyon.

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Rusby, F.F. 1911.

Physical Standards of the U.S.P.

Pharm. Era, 44, p. 95. (Dig. Com. U.S.P., 1911, p. 346.)

He says that Eriodictyon should not contain more than 5% of stems.

Welmer, C.

1911.

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Die Pflanzenstoffe, p. 642.

The author gives the synonymy, habitat and some constituents of *Eriodictyon Californicum*.

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(Editor)

1912.

Yerba Santa Cough Mixture.

West. Drugg., 34, p. 457.

He gives a formula for the preparation of a cough syrup containing Yerba Santa.

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(Editor)

1913.

Syrup of Yerba Santa, Licorice and Chocolate Comp.

West. Drugg., 35, p. 127.

The editor gives Falk's formula for preparing the compound syrup.

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Osborne, O.T.

1913.

A Last Plea For a Useful Pharmacopoeia.

Jour. Am. Med. Assoc., 60, p. 1429. (Dig. Com. U.S.P., 1913, p. 275.)

*Eriodictyon* is referred to as one of the drugs which should be dropped from the Pharmacopoeia.

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(Editor)

1914.

Suggestions on Drug Plant Culture in California.

Pac. Pharm., 7, p. 297. (Dig. Com. U.S.P., 1914, p. 267.)

He says that *Eriodictyon* grows well on hillsides and could be marketed easily.

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(Rev. Com.)

1914.

United States Pharmacopoeia.

Jour. Am. Pharm. Assoc., 3, p. 378. (Pharm. Era, 47, p. 207.)

The article gives a complete description of Eriodictyon submitted for the U.S.P. IX Revision.

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Abrams, L. & Smiley, F.J.

1915.

Taxonomy and Distribution of Eriodictyon.

Bot. Gaz., 60, p. 115. (Dig. Com. U.S.P., 1915, p. 254.)

A lengthy and complete article on Eriodictyon from a botanical point of view. Three figures are given.

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Dohme, A.R.L.

1917.

Report of Committee on Prevention of Adulteration.

Proc. N.W.D.A., 43, p. 513. (Dig. Com. U.S.P., 1917, p. 203.)

He states that commercial Eriodictyon contains as high as 50% of stems and twigs.

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Farwell, O.A.

1917.

Botanical Nomenclature of U.S.P. IX.

Drugg. Circ., 61, p. 174. (Dig. Com. U.S.P., 1917, p. 203.)

He states that the correct authority for Eriodictyon is "Torrey" not "Greene".

---

Kueny, R.

1917.

Ueber das "Chrysoerial" der "Yerba Santa" (Pharm. Zentrhl.)

Arch. d. Pharm., 255, p. 308. (Pharm. Zentrhl. 61, p. 34.)

Eriodictyol is the same as 1,3,4 - Trioxy - 3 - methoxy flavon.

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Oesterle, O.A. 1918.

Ueber das "Chrysoeriol" der "Yerba Santa".

Arch. d. Pharm., 256, p. 119. (Dig. Com. U.S.P., 1918, p. 218; Pharm. Zentrihl., 61, p. 34; Dig. Com. U.S.P., 1920, p. 250.)

A review of the articles on the constituents of Yerba Santa.

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Remington, J.P., Wood, F.C., Sadtler, S.P. 1918.  
LaWall, C.F., Kraemer, H., Anderson, J.F.

Eriodictyon U.S.

U.S. Dispens., 20 ed., p. 428.

They give names, habitat, description, props. uses, dose and official preparations of Eriodictyon.

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(Editor) 1919.

Yerba Santa in Old Coughs.

Ecler. Med. Journ., 79, p. 562.

He mentions the use of Yerba Santa in old coughs.

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Ewe, G. 1919.

Report of Committee on Drug Market.

Proc. Penn. Pharm. Assoc., 42, p. 92. (Jour. Am. Pharm. Assoc., 8, p. 758; Dig. Com. U.S.P., 1919, p. 231.)

He reports an excess of stems in commercial samples of Yerba Santa.

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Ewe, G.E. 1920.

Report of Committee on Drug Market.

Proc. Penn. Pharm. Assoc., 43, p. 120. (Dig. Com. U.S.P., 1920, p. 250.)

He finds an excessive amount of stems in four lots of Yerba Santa examined.

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(Editor)

1921.

Syrup of Yerba Santa. Hellmuth.

West. Drugg., 43, p. 23.

A formula for Hellmuth's Syrup of Yerba Santa is given.

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Fantus, B. & Snow, C.M.

1921.

Elixirs of the U.S.P. & N.F.

Jour. Am. Pharm. Assoc., 10, p. 281.

The use of aromatic elixir of Eriodictyon is discussed.

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Lloyd, J.U.

1921.

Eriodictyon ("Yerba Santa").

Orig. & Hist. Pharmac. Veget. Drugs, Chem. Preps. with  
Bibliog., V. 1, p. 132.

It tells of study, introduction and history of Eriodictyon with names of men connected with it.

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List of Journals Consulted

Am. Drugg.	1884-1891
Am. Drugg. & Pharm. Rec.	1892-1921
Am. Jour. Pharm.	1827-1922
Dig. Com. U.S.P. & N.F.	1905-1920
Drugg. Circ.	1857-1914
Eclec. Med. Journ.	1853-1919
Journ. Am. Pharm. Assoc.	1912-1922
Journ. Mat. Med.	1859-1882
Merck's Rept.	1893-1921
Midl. Drugg.	1902-1922
New Remedies	1876-1883
Pharm. Era	1887-1922
Pharm. Rec.	1884-1893
Pharm. Rev.	1896-1903
Pharm. Ruinchs.	1883-1895
Proc. Am. Pharm. Assoc.	1852-1911
West. Drugg.	1879-1920
Year-Book Am. Pharm. Assoc.	1912-1920

Dispensatories

1806. Am. Dispens. - Coxe, J.R.  
1818. Am. Dispens. - Coxe, J.R.  
1827. Am. Dispens. - Coxe, J.R.  
1809. New Dispens. - Thatcher, J.  
1822. Materia Medica - Bigelow, J.  
1834. U.S. Dispens. - Wood, G.B., Bache, F.  
1836. U.S. Dispens. - Wood, G.B., Bache, F.  
1839. U.S. Dispens. - Wood, G.B., Bache, F.  
1843. U.S. Dispens. - Wood, G.B., Bache, F.  
1854. U.S. Dispens. - Wood, G.B., Bache, F.  
1864. Am. Dispens. - King, J.  
1865. U.S. Dispens. - Wood, G.B., Bache, F.  
1870. U.S. Dispens. - Wood, G.B., Bache, F.  
1875. Am. Dispens. - King, J.  
1879. Natl. Dispens. - Stille, A., Maisch, J.M.  
1879. U.S. Dispens. - Wood, G.B., Bache, F.  
1886. U.S. Dispens. - Wood, H.C., Remington, J.P.,  
Sadtler, S.P.  
1898. Am. Dispens. - Felter, F.W., Lloyd, J.U.  
1900. Am. Dispens. - Felter, F.W., Lloyd, J.U.  
1894. U.S. Dispens. - Wood, H.C., Remington, J.P.,  
Sadtler, S.P.  
1907. U.S. Dispens. - Wood, H.C., Remington, J.P.,  
Sadtler, S.P., Lyons, A.B., Wood, H.C. Jr.

HISTORY OF ERIODICTYON

in the

UNITED STATES PHARMACOPOEIA

1820 - 1910.

U.S.P. Data.

U.S.P. 1890, p. 114

Eriodictyon

Eriodictyon

The leaves of Eriodictyon glutinosum Bentham (nat. ord. Hydrophyllaceae).

Oblong - lanceolate, 5 to 10 Cm. long, acute at the apex, and below narrowed/ into a short petiole, the margin sinuately toothed to nearly entire; upper/ surface green, smooth, and covered with a brownish resin; lower surface/ reticulate and minutely white-tomentose; odor somewhat aromatic; taste/ balsamic and sweetish.

Prep.: Extractum Eriodictyi Fluidum.

U.S.P. 1900, p. 130

Eriodictyon

Eriodictyon

The dried leaves of Eriodictyon californicum (Hooker and Arnott) Greene (Fam. Hydrophyllaceae).

Usually occurring in fragments; entire leaf oblong - lanceolate, 5 to 15 Cm./ long and/ to 3 Cm. broad, acute at the apex, narrowed below into a short,/ broad petiole, the margin more or less incurved, entire or irregularly serrate, or/ crenate-dentate; upper surface yellowish-green, smooth covered with a brown-/ ish resin; lower surface whitish or yellowish white, conspicuously reticulated/ and densely tomentose brittle, but flexible in a

damp and warm atmosphere;/ odor somewhat aromatic; taste balsamic and sweetish.

Average dose 1 Gm. (15 grains).

U.S.P. 1910, p. 139

Eriodictyon

Eriodictyon

Eriodict. - Yerba Santa.

The dried leaves of Eriodictyon californicum (Hooker and Arnott)/ Greene (Fam. Hydrophyllaceae), without the presence or admixture of/ more than 5 per cent. of stems or other foreign matter.

Usually in fragments; when entire, laminae lanceolate, from 5 to 15 Cm.in/ length, and from 1 to 3 Cm. in breadth; summits acute; bases slightly tapering/ into short petioles; margin irregularly serrate or crenate-dentate; upper sur-/faces yellowish brown, covered with a more or less glistening resin; under sur-/faces grayish or yellowish-white, conspicuously reticulate with greenish yellow/ veins; minutely tomentose between the reticulations, thick, brittle; odor aro-/matic; taste balsamic, bitter, becoming sweetish.

Under the microscope, transverse sections of the laminae of Eriodictyon show/ upon the upper surface large epidermal cells, the outer walls being very uneven,/ owing to the indentations which appear as striations in surface view; glandular/ hairs numerous, with short-/celled stalks

and 6- to 8- celled glandular heads;/ palisade cells very narrow, from 2 to 6 rows deep, containing numerous chloro-/ plastids; cells of dorsal-pneumatic tissue (loose mesophyll) very few; fibro-/ vascular tissues not strongly developed except in the midrib and more prominent/ veins; numerous celled, much twisted, thick-walled, non-glandular hairs/ occurring on the lower surface between the veins.

Under the microscope, sections of the stems of *Eriodictyon* show the epidermis/ usually replaced by strongly lignified cork; cortex of from 10 to 20 rows of more/ or less rounded cells; bast-fibers deep-seated with thick, more or less strongly/ lignified walls and occurring in small groups forming a more or less interrupted/ circle; sieve tissues in the narrow zone; wood-wedges consisting of tracheae with/ spiral thickenings, simple or bordered pores and numerous strongly lignified/ wood-fibers, separated by medullary rays 1-cell in width; pith very large, the/ walls of the cells being strongly lignified and with numerous simple pores.

Preparation - Fluidextractum *Eriodictyi*.

Average Dose - Metric, 1 Gm. - Apothecaries, 15 grains.

Summary of U.S.P. Data

Official:-

1890, 1900, 1910.

Official Latin Title:-

Eriodictyon 1890, 1900, 1910.

Official English Title:-

Eriodictyon 1890, 1900, 1910.

Abbreviations:-

Eriodictyon 1910.

Synonyms:-

Yerba Santa 1910.

Botanical Name:-

Eriodictyon glutinosum Bentham 1890.

Eriodictyon californicum (Hooker and Arnott)

Greene 1900, 1910.

Family:-

Nat. ord. Hydrophyllaceae 1890.

Fam. Hydrophyllaceae 1900, 1910.

Part used:-

The leaves 1890.

The dried leaves 1900, 1910.

Description:-

- 1890.

- 1900.

- 1910.

Preparations:-

Extractum Eriodictyi Fluidum 1890.

Fluidextractum Eriodictyi 1910.

Dose:-

1 Gm. (15 grains) 1900.

Metric, 1 Gm. - Apothecaries, 15 grains  
1910.

Approved by W. O. Richtmann

Asst. Prof. of Pharmacognosy