

Pharmacy  
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BIBLIOGRAPHY  
OF  
BAROSMA SPECIES YIELDING BUCHU

BY  
JOHN HAROLD HOLZER

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SCHOOL OF PHARMACY

A THESIS SUBMITTED FOR THE DEGREE OF  
GRADUATE IN PHARMACY

UNIVERSITY OF WISCONSIN  
1934

Thumberg, C. P.

1794-1800

*D. Folies ovates crenatis fubtus punctates,  
florebux aullaribus folitaries.*

Prodromus plantarum capensium etc. (Willdenow, Linne's  
Species Plantarum, 4 ed., v. 1, p. 1138; Wood & Bache,  
U. S. Dispens., 2 ed., p. 283; Ibid., 3 ed., p. 274;  
Kohler's Medizinal Pflanzen, 3, p. 63.)

The original was not available.

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Willdenow, C. L.

1806-1810

(*Agathosma crenatum.*)

Hortus Berolinense, led., v. \_\_, p. \_\_; (Wood & Bache, U. S.  
Dispens., 2 ed., p. 283; Ibid., 3 ed., p. 274.)

The original was not available.

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Willdenow, C. L.

1809

(*Barosma crenata.*)

Enumerati Plantarum Berolinense, p. 257. (Kohler's Medizinal  
Pflanzen, 3, p. 63.)

The original was not available.

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Woodville, W.

1810

(*Diosma crenata.*)

Medical Botany, 2 ed., v. 1, p. 52. (Wood & Bache, U. S.  
Dispens., 4 ed., p. 284; Ibid., 5 ed., p. 300; Ibid., 6 ed.,  
p. 300; Ibid., 7 ed., p. 301; Ibid., 8 ed., p. 301; Ibid.,  
9 ed., p. 148; Ibid., 10 ed., p. 148; Ibid., 11 ed., p. 155;  
Ibid., 12 ed., p. 174; Ibid., 13 ed., p. 182; Ibid., 14 ed.,  
p. 184.)

Describes the plant and comments on its properties.

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(Diosma crenata.)

Botanical Cabinet, v. 5., p. 404; (Wood & Bache, U. S. Dispens., 4 ed., p. 284; Lindley, J., Flora Medica, p. 213; Griffith, R. E., Medical Botany, p. 191; Decandolle, A. P., Prodrems, 1, p. 714; Bentley, R. & Timen, H., Medical Plants, No. 1, p. 46.)

The original was not available.

Reece, R.

1821

(Buchu.)

Monthly Gazette of Health, 6, p. 799. (Fluckiger & Hanbury, Pharmacographia, 1 ed., p. 99; Ibid., 2 ed., p. 109; Tschirch, A. Handbuch Der Pharmakognosie, led., v. 2, p. 1171.)

(Reece & Company of London were the first importers of Buchu and introduced it to the Medical profession in 1821.)

DeCandolle, A. P.

1824

Diosma crenata.

Prodrems, v. 1, p. 714. (Wood & Bache, U. S. Dispens., 4 ed., p. 284; Ibid., 5 ed., p. 300; Ibid., 6 ed., p. 300; Ibid., 7 ed., p. 301; Ibid., 8 ed., p. 301; Ibid., 9 ed., p. 148; Ibid., 10 ed., p. 148; Ibid., 11 ed., p. 155; Ibid., 12 ed., p. 174; Ibid., 13 ed., p. 182; Ibid., 14 ed., p. 184; Ibid., 15 ed., p. 302; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Ibid., 19 ed., p. 249; King, Am. Dispens., 6 ed., p. 162; Ibid., 8 ed., p. 156; Ibid., 10 ed., p. 156; Ibid., 15 ed., p. 156; Ibid., 16 ed., p. 156; Griffith, R. E., Medical Botany, p. 191; Kohler's Medizinal Pflanzen, 3, p. 63.)

Describes the plant, Diosma crenata.

Bartling, F. G., &amp; Wendl, H. L.

1824-1825

(Diosmin.)

Beitrage zur Botanik, 94, t. B.; (Kohler's Medizinal Pflanzen, 3, p. 63.)

The original was not available.

Jussieu, A.

1825

(*Barosma betulina*.)

Memoires sur ler Rutaceae, etc., 20. (Kohler's Medizinal Pflanzen, 3, p. 63.)

The original was not available.

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Brandes, R.

1827

Chemische Untersuchung Der Buccoblatter.

Archiv. d. Pharm., 22, p. 229. (Am. Jour. Pharm., 58, p. 475; Tschirch, A., Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171; Kohler's Medizinal Pflanzen, 3, p. 63.)

Makes a number of test with various solvents and records the results as to substances found both qualitatively and quantitatively.

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Cadet de Gassicourt, F. .

1827

Sur le Diosma crenata.

Jour. d. Pharm. et de. Chem., 13, p. 106. (Am. Jour. Pharm., 58, p. 475; Tschirch, A., Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171; Archiv. D. Pharm., 22, p. 229.)

Compares the leaves of the above plant, with those of several other species of the same genus, giving references for descriptions, and describes the methods whereby 5 different constituents were isolated.

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Hooker, W. S.

After 1827

(*Barosma crenulata*.)

Botanical Magazine, (after v. 54.) pl. 3413. (Tschirch, A., Handbuch der Pharmakognosie, 1 ed., v. 2, p. 1171; Lindley, J., Flora Medica, p. 213; Kohler's Medizinal Pflanzen, 3, p. 63.)

The original was not available.

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Carpenter, G. W. 1831

Buchu.

Essays of the *Materia Medica*, 1, p. 178.

Discusses the therapeutic use of Buchu, supplying case examples.

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Spach, E. 1834

(*Barosma betulina*.)

Suites a Buffon, v. 2, p. 330. (Kohlers *Medizinal Pflanzen*, 3, p. 63.)

The original was not available.

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Guibourt, N. J. 1836

Feuilles de Bucco.

*Histoire abrégée des Drogues Simples*, 3 ed., v. 2, p. 132.

Gives several common names of the leaves, plants yielding them, description, physical and therapeutic properties.

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Kosletetzke, V. F. 1836

(*Barosma serrulatum*.)

*Allgemeine Medizinisch Pharmaceutische Flora*, etc., v. 5, p. 1798. (Kohler's *Medizinal Pflanzen*, 3, p. 63.)

The original was not available.

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Wood, G. B. & Bache, F. 1836

*Diosma Crenata Folia*.-Buchu Dub. Buchu Leaves.

U. S. Dispens., 2 ed., p. 283; *Ibid.*, 3 ed., p. 274;  
*Ibid.*, 4 ed., p. 284.

Discusses the plant, yielding the properties, uses, and official preparations of Buchu.

Murray, J.

1837

Buchu.

System of Materia Medica, 6 ed., p. 295.

Briefly describes the leaves, giving their salient characteristics and discusses their therapeutic value.

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Lindley, J.

1838

(*Barosma crenata*.)

Flora Medica, p. 213. (Wood & Bache, U. S. Dispens., 5 ed., p. 300; Ibid., 6 ed., p. 300; Ibid., 7 ed., p. 301; Ibid., 8 ed., p. 301; Ibid., 9 ed., p. 148; Ibid., 10 ed., p. 148; Ibid., 11 ed., p. 155; Ibid., 12 ed., p. 174; Ibid., 15 ed., p. 302; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Griffith, R. E., Medical Botany, p. 191; Bentley & Trimen, Medical Plants, No. 1, p. 46.)

Describes the plant and gives its characteristics.

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Lindley, J.

1838

(*Barosma serratifolia*.)

Flora Medica, p. 213. (Wood, Remington & Sadtler, U. S. Dispens., 15ed., p. 302; Ibid., 16 ed., p. 209; Ibid., 17 ed., p. 274.)

Describes the plant, *Barosma serratifolia*.

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Von Winkler, E.

1840

Bucco-oder Buccu-Blatter, Folia Buchu.

Medicinisch-pharmaceutisches Real-Lexikon, v. 1, p. 223.

Describes *Barosma crenata* as a source of Buchu leaves.

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## Diosmin in Krystallen.

Buchner's Report. f. Pharm., 84, p. 63. (Am. Jour. Pharm., 58, p. 475; Stille & Maisch, Nat. Dispens., 3 ed., p. 335; Ibid., 5 ed., p. 354; Tschirch, A., Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171.)

Describes a crystalline principle which he had previously isolated 3 years ago, and considers it as well as the volatile oil as the active principle of Buchu. He named it Diosmin.

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Griffith, R. E.

1847

## Barosma.

Medical Botany, p. 191.

Gives botanical origin, common names, description, constituents, and medical properties of Buchu.

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Wood, G. B. & Bache, F.

1847

## Diosma. U. S. Lond. Buchu.

U. S. Dispens., 5ed., p. 301; Ibid., 6 ed., p. 300; Ibid., 7 ed., p. 301; Ibid., 8 ed., p. 301.

Gives synonyms, brief history, description, properties, uses and official preparations of Buchu.

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Pappe, L.

1851

## (Buchu)

Florae Capensis Medica Prodremus, 3, p. 256. (Pharm. Jour., 10, p. 475; Bentley & Trimen, Medical Plants, No. 1, p. 46.)

(Gives a brief description and tells of adulterants of Buchu.)

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Wood, G. B. & Bache, F. 1851

Buchu. U. S., Lond., Dub.

U. S. Dispens., 9 ed., p. 148; Ibid., 10 ed., p. 148;  
Ibid., 11 ed., p. 155.

Discusses history, description, properties, uses;  
Tabulates scientific names, synonyms and official preparations of Buchu.

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King, J. & Newton, R. 1852

*Diosma crenata*, Buchu.

Am. Dispens., 1 ed., p. 160.

Briefly states history, properties, and uses of Buchu.

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Wiggers, N. 1853

Diosmeae.

Grundriss der Pharmacognosie, 3 ed., p. 456.

Lists the species of *Diosma* yielding Buchu leaves with a descriptions, constituents, qualitatively and quantitatively and gives special mention of Diosmin.

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Campagne, P. J. 1854

Folia Buchu.

Handboek voor droogstenen apothekers Leerlingen, p. 330.

Lists several common names, gives botanical origin with a description of each type and lists constituents of Buchu leaves.

Rittenhouse, H. N.

1854

Pharmaceutical Observations on Buchu.

Am. Jour. Pharm., 26, p. 484.

Lists the constituents, their properties, and gives case examples of the therapeutic action of Buchu.

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Loudons, J.

1855

Diosma.

Encyclopedia of Plants, Rev. ed., p. 180. (Wood & Bache, U. S. Dispens., 2 ed., p. 283; Ibid., 3 ed., p. 274.)

Lists several species of Diosma and gives the characteristics of each.

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Berg, O.

1857.

Folia Buchu.

Handbuch Der Pharmazeutischen Botanik, 2 ed., p. 210; Ibid., 4 ed., p. 286. (Tschirch, A., Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171; Bentley & Trimen, Medical Plants, No. 1, p. 47; Kohlers Medizinal Pflanzen, 3, p. 63.)

Gives 3 common names, 5 scientific names, botanical classification, description of leaves of the several species, and constituents as found by 3 different workers.

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Lessing, M. B.

1859

Bucco.

Kurzer Abriss der Materia Medica, p. 289.

Gives botanical origin with a description, preparations and uses of Buchu.

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Harvey, W. H. & Sonder, O. W. 1859-1865

(Buchu.)

Flora Capensis, etc., v. 1, p. 392. (Tschirch, A., Handbuch der Pharmakognosie, 1 ed., v. 1, p. 1171; Kohler's Medizinal Pflanzen, 3, p. 63.)

The original was not available.

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Stille, A. 1860

Buchu.

Therapeutics and Materia Medica, V. 2, p. 367. (Am. Jour. Pharm., 36, p. 129.)

Gives a description, history, uses, and administration of Buchu.

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Henkel, J. B. 1862

Diosmeae, R. Brown.

Atlas zur Medizinisch Pharmazeutischen Botanik Die Analysen Der Wichtigsten Pflanzenfamilier, p. 48. (Kohlers Medizinal Pflanzen, 3, p. 63.)

In the above family, gives the generic characteristics of Barosma and the specific characteristics of 4 species of the genus, the latter yielding Buchu leaves.

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Bedford, P. W. 1863

On the Comparative Values of the Commercial Varieties of Buchu.

Proc. Am. Pharm. Assoc., 11, p. 211. (Am. Jour. Pharm., 36, p. 129; Jour Pharm., 36, p. 129; Ibid., 51, p. 148; Stille & Maisch, Nat. Dispens., 3 ed., p. 335; Ibid., 5 ed., p. 354; Wood & Bache, U. S. Dispens., 13 ed., p. 182; Ibid., 14 ed., p. 184; Ibid., 15 ed., p. 182; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Ibid., 18ed., p. 303; Ibid., 19 ed., p. 249; Ibid., 20 ed., p. 243; Pharmacographia, 2 ed., p. 109; Bentley & Trimen, Medical Plants, No. 1, p. 45.)

Expiermental results are given from the quanatative analysis of the volatile oil in long and short buchu proving that short buchu gives a larger yield of volatile oil.

## Folia Bucco.

Lehrbuck der Pharmakognosie, 1 ed., p. 134; Ibid., 2 ed., p. 204.

Gives the botanical origin with descriptions of several species, adulterants, constituents and a figure of each of 5 species.

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King, J.

1864

Barosma Crenulata (Diosma Crenata) Kerbbattrige Diosma. Buchu (Buchublatte)

Am. Dispens., 6 ed., p. 162; Ibid., 8 ed., p. 156; Ibid., 10 ed., p. 156; Ibid., 15 ed., p. 156; Ibid., 16 ed., p. 156.

Describes the plant, discusses the history, properties, uses and gives the official preparations of Buchu.

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Maisch, J. M.

1864

Impurities and Adulterants of Buchu.

Am. Jour. Pharm., 36, p. 101.

Among other drugs, tells of the impurities and adulterants found in bales of Buchu leaves.

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Wood, G. B. &amp; Bache, F.

1865

Buchu, U. S.

U. S. Dispens., 12 ed., p. 174; Ibid., 13 ed., p. 182; Ibid., 14 ed., p. 184; Ibid., 15 ed., p. 302; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Ibid., 19 ed., p. 249; Ibid., 20 ed., p. 245; Ibid., 21 ed., p. 240.

Describes the plant, properties, uses, and lists the official preparations of Buchu.

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Carson, J. 1867

Buchu U. S.

Materia Medica, 1, p. 64.

Mentions the uses of Buchu and its properties.

---

Henkel, J. B. 1867

Folia Bucco.

Handbuch der Pharmacognosie, p. 231. (Kohler's Medizinal Pflanzen, 3, p. 63.)

Gives the botanical origin of the several commercial varieties of Buchu, their constituents, properties and uses.

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Robbins, D. C. 1868

Notes on Quality & Supply of Drugs for the Years 1867-68.

Proc. Am. Pharm. Assoc., 16, p. 324.

Relative to Buchu leaves, says, "The supply of small, round, from the Cape of Good Hope, is very abundant, while long leaves are very scarce."

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Guibourt, N. J. 1869

Feuilles de Buchu.

Histoire naturelle des Drogues Simple, 6 ed., v. 3, p. 551.

Gives several common names for the leaf, botanical origin, and description of each species and their medicinal uses with an illustration of the flowering branch of one species.

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Brown, O. R. 1870

Buchu-Barosma Crenata.

The Complete Herbalist, p. 174.

Comments on the description and virtues of Buchu.

McKesson, J.

1871

Report of the Committee on the Drug Market.

Proc. Am. Pharm. Assoc., 19, p. 404.

In a report on the market, the fluctuations of the prices of Buchu leaves are tabulated.

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Pollock, A.

1872

Buchu.

A Botanical Index, p. 56.

Lists Buchu as coming from *Barosma crenata*.

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Fluckiger, F. A.

1873

Uiber die bukublatte.

Schwizs. Wochenschi, f. Pharm., 11, p. 475. (Buchner's Neues Repert. f. Pharm., 26, p. 102; Pharm. Jour., 33, p. 689; Am. Jour. Pharm., 46, p. 235; Pharmacographia, 1 ed., p. 99; Ibid., 2 ed., p. 109; Yrbk. Br. Pharm. Conf., 11, p. 103; Pharm. Jour., 34, p. 213; Tschirch, A., Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171; Zornig, H., Arzneidrogen, 2 ed., p. 172; Jour. f. prakt. Chemie., N. F., v. 54, p. 433; Bentley & Trimen, Medical Plants, No. 1, p. 47; Kohler's Medizinal Pflanzen, 3, p. 63.)

Describes the leaves of several species of *Barosma* yielding commercial Buchu, some of their characteristic structures and constituents. Also mentions a similar leaf from a different plant.

## Folia Buchu.

Pharmacographia, 1 ed., p. 98; Ibid., 2 ed., p. 109; (Wood, Remington & Sadtler, U. S. Dispens., 15 ed., p. 302; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Ibid., 19 ed., p. 249; Ibid., 20 ed., p. 243; Felter & Lloyd, King's Am. Dispens., 18 ed., v. 1, p. 371; Stille & Maisch, Nat. Dispens., 3 ed., p. 335; Ibid., 5 ed., p. 354; Am. Jour. Pharm., 53, p. 331; Zornig, H. Arzneidrogen, 2 ed., p. 172; Bentley & Trimen, Medical Plants, No. 1, p. 45; Ibid., No. 1, p. 47.)

Gives in detail the botanical origin, history, description, microscopic structure, chemical composition, commerce and uses of Buchu.

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 Hager, H.

1876

## Barosma.

Handbuch der Pharmaceutischen Praxis, 1 ed., v. 1, p. 562. (Kohler's Medizinal Pflanzen, 3, p. 63.)

Gives the botanical origin, commercial varieties, pharmacopoeia, synonyms, description, preservation, constituents, uses and figures of 4 types of Buchu.

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 Wayne, E. S.

1876

## Researches Upon Buchu.

Am. Jour. Pharm., 51, p. 18. (Wood & Bache, U. S. Dispens., 15 ed., p. 302; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Ibid., 19 ed., p. 249; Ibid., 20 ed., p. 243; Stille & Maisch, Nat. Dispens., 3 ed., p. 335; Ibid., 4 ed., p. 354; New Remedies, 5, p. 47; Pharm. & Chem., 9, p. 53; Fluckiger & Hanbury Pharmacographia, 2 ed., p. 109; Am. Jour. Pharm., 58, p. 475; Yrbk. Br. Pharm. Conf., 13, p. 229; Ibid., 19, p. 195; Tschirch, A., Handbuch Der Pharmakognosie, 1 ed., v. 1, p. 1171.)

Tells of discovery of salicylic acid in Buchu.

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## Feuilles de Bucco.

Nouveaux Elements D'Histoire Naturelle Medicale, 2 ed., p. 289;

Lists the common names in several languages, gives habitat, species yielding drugs, allied drugs, description and constituents, medicinal use and their use by the Hottentots with an illustration of a flowering branch of *Diosma crenatum*.

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Fluckiger, F. A. & Hanbury, D.

1878

## Feuilles de Buchu.

Histoire Des Drogues D'origine Vegetale, 1, p. 206. (Kohler's Medizinal Pflanzen, 3, p. 63.)

Gives botanical origin, histology, description, microscopy, constituents, commerce, usages and substitutes of Buchu.

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Jones, W. H.

1879

Amount of Ash and Soluble Matter in the Three Sorts of Buchu.

Pharm. Jour., 38, p. 673. (Proc. Am. Pharm. Assoc., 12, p. 211; Ibid., 27, p. 206; Am. Jour Pharm., 51, p. 198; Wood, Remington & Sadtler, U. S. Dispens., 15 ed., p. 302; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Ibid., 19 ed., p. 249; Ibid., 20 ed., p. 243; Ibid., 21 ed., p. 240; Stille & Maisch, Nat. Dispens., 3 ed., p. 335; Ibid., 5 ed., p. 354; Yrbk. Br. Pharm. Conf., 16, p. 182; Tschirch, A., Handbuch der Pharmakognosie, 1 ed., v. 2, p. 1171.)

Experimental data on the three species of Buchu are given with some discussion as to the technique employed.

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Sayre, L. E.

1879

## Buchu.

Conspectus of Organic Materia Medica and Pharmacal Botany. p. 120.

Describes the three species of buchu, and comments of their characteristics and properties.

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Buchu, U. S. Buchu Leaves.

Nat. Dispens., 1 ed., p. 302; Ibid., 2 ed., p. 305; Ibid., 3 ed., p. 335; Ibid., 5 ed., p. 354.

Gives the botanical origin, description, constituents, illustrations, adulterants, physiological action and medical uses. Tabulates the official preparations of Buchu.

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Bentley, R. Trimen, H.

1880

Barosma betulina.

Medicinal Plants, No. 1, p. 45. (Wood, Remington & Sadler, U. S. Dispens., 15 ed., p. 303; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Kohlers Medizinal Pflanzen, 3, p. 63)

Gives description, habitat, characteristics, constituents, commerce, medical properties and uses of Barosma betulina, with a full page colored illustration.

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Bentley, R. Trimen, H.

1880

Barosma Crenulata.

Medicinal Plants, No. 1, p. 46. (Wood & Bache, U. S. Dispens., 15 ed., p. 302; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Ibid., 18 ed., p. 253; Ibid., 19 ed., p. 249; Ibid., 20 ed., p. 243; King, American Dispens., 6 ed., p. 162; Ibid., 8 ed., p. 156; Ibid., 10 ed., p. 156; Ibid., 15 ed., p. 156; Ibid., 16 ed., p. 156.)

Gives description, habitat, characteristics, constituents, commerce, medical properties, and uses of Barosma crenulata, with a full page colored illustration.

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*Barosma serratifolia.*

Medicinal Plants, No. 1., p. 47; (Wood, Remington & Sadtler, U. S. Dispens., 17 ed., p. 274; Tschirch, A. Handbuch der Pharmakognosie, 1 ed., v. 2, p. 1171.)

Gives description, habitat, characteristics, constituents, commerce, medical properties and uses of *Barosma serratifolia* with a full page colored illustration.

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(Editor.)

1881

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Drugg. Circ., 25, p. 172.

The difference in price between long and short buchu is briefly discussed.

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Maisch, J. M.

1881

The Stearoptene of Buchu Leaves.

Am. Jour. Pharm., 53, p. 331. (Wood, Remington & Sadtler, U. S. Dispens., 15 ed., p. 302; Ibid., 16 ed., p. 309; Ibid., 17 ed., p. 274; Ibid., 19 ed., p. 249; Ibid., 20 ed., p. 243; Am. Jour. Pharm., 58, p. 475; Drugg. Circ., 25, p. 109.)

Generalizes on experimental data and the constituents thought to be in Buchu. Tells of identification of the Stearoptene, a crystalline substance named dios-phenol.

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Edes, R. T.

1883

Buchu.

Therapeutic Handbook of the U. S. Pharmacopoeia, p. 59.

Briefly describes the medical uses and properties of Buchu.

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The Genitive of Buchu.

Drugg. Circ., 27, p. 57.

In response to an inquiry Buchu was classed as an irregular noun that is indeclinable.

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Merrell, A.

1883

Buchu Leaves.

Digest of Materia Medica and Pharmacy, p. 132.

Mentions 3 varieties of Buchu, constituents, preparations and uses of the leaves.

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Hedges, H. F.

1884

Buchu folia.

A Polygot Index of <sup>m</sup>ateria <sup>m</sup>edica, 1, p. 32.

Lists names for Buchu leaves in 6 languages.

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Oldberg, O. & Wall, O. A.

1884

Buchu. U. S.

A Companion to the U. S. Pharmacopoeia, p. 241.

Gives a general description and discussion of the plant, constituents, uses and formulas for preparations of Buchu.

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Fenner, B.

1886

Buchu.

Working Formulae, 2 ed., p. 417.

Briefly describes the properties and discusses Buchu.

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## Buchu and Oil of Buchu.

Am. Jour. Pharm., 58, p. 475. (Yrbk. Br. Pharm. Conf., 24, p. 171; Tschirch, A. Handbuch Der Pharmakognoxie, 1 ed., v. 2, p. 1176; Jour. f. prakt. Chemie., N. V. v. 54, p. 433.)

Comments on the constituents of Buchu leaves.

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(Editor.)

1887

## False Buchu.

Drugg. Circ., 31, p. 27.

Reports that the price for short buchu has been inflated but another species is being offered at half the price.

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Hirsh, B.

1887

## Folia Bucco.

Universal Pharmacopoe, 1 ed., v. 1, p. 747. (Kohler's Medizinal Pflanzen, 3, p. 63. )

Gives various pharmacopoeial titles, botanical origin, pharmacopoeias official in, description and preservation of Buchu leaves.

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Maisch, J. M.

1887

## Buchu.

Manual of Organic Materia Medica, 3 ed., p. 244; Ibid., 5 ed., p. 251; Ibid., 6 ed., p. 239; (Kohler's Medizinal Pflanzen, 3, p. 63.)

Gives botanical origin, habitat, description, constituents and properties of Buchu with illustrations.

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Beck, A. L.

1888

Percolation of Buchu Leaves.

Am. Jour. Pharm., 60, p. 137.

Reports on experiments in percolating Buchu, gives experimental data on exhaustion of the drug.

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Shimoyama, Y.

1888

Bertrage zur chemischen Kenntniss der Bukublatte.

Archive d. Pharm., 226, p. 403. (Am. Jour. Pharm., 60, p. 624; Yrbk. Br. Pharm. Conf., 26, p. 143; Wood, Remington & Sadler, U. S. Dispens., 17 ed., p. 274; Ibid., 19 ed., p. 249; Ibid., 20 ed., p. 243; Ibid., 21 ed., p. 241; Pharm. Jour., 47, p. 1087; Tschirch, A., Handbuch Der Pharmakognosie., 1 ed., V. 2, p. 1171; Jour. f. prakt. Chemie., N. F., v. 54, p. 163; Kohler's Medizinal Pflanzen, 3, p. 63.)

Prepares a number of compounds with diosphenol, also several derivatives of it, and also compounds of these latter.

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Beckunts, H. & Hirsch, B.

1889

Folia Bucco.

Handbuch der Pharmacie, v. 2, p. 49. (Kohler's Medizinal Pflanzen, 3, p. 63.)

Gives the botanical origin, commercial varieties, description, adulterants and preservation of Buchu.

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(Editor.)

1889

Buchu Camphor.

Drugg. Circ., 33, p. 64.

Describes how buchu camphor is obtained from the volatile oil of Buchu.

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Pharm. Record, 10, p. 380.

A comparative study of the relative value of the three official Buchus is given.

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Muller, C.,

1890

Buccoblatter.

Medicinalflora, p. 365.

Buchu leaves are obtained from a number of species of Barosma and adulterants are obtained from various species of Empleureum.

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Parke, Davis & Co.

1890

Buchu

Organic Materia Medica, 2 ed., p. 33.

Gives botanical origin, properties, and preparations of Buchu.

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Simmonds, P. L.

1890

Medicinal Uses of Leaves.

Am. Jour. Pharm., 62, p. 472.

Among other drugs, discusses briefly the medicinal value of Buchu and gives reference to species having the best therapeutic value.

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Thompson, C. J. S.

1890

Buchu.

Pharm. Jour., 21, p. 281. (Am. Jour. Pharm., 62, p. 526.)

Lists the yield of resins and volatile oil of Buchu.

Note on the Comparative Medicinal Values of the Three Official Buchus.

Pharm. Jour., 50, p. 420. (Drugg. Circ., 35, p. 19; Ibid., 37, p. 336; Brit. & Col. Drugg., 18, p. 251; Yrbk. Br. Pharm. Conf., 27, p. 499; Proc. Am. Pharm. Assoc., 39, p. 415.)

The physiological reactions to the different Buchus is commented with data on the chemical and botanical characteristics of the 3 Buchus.

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(Editor.)

1891

Buchu As a Perfume.

Chem. & Drugg., 38, p. 308.

Hottentots use Buchu to rub on their bodies as an efficacious perfume. A thimbleful of Buchu is sold in exchange for a lamb.

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(Editor.)

1891

Note on the Comparative Medicinal Value of the Official Buchus.

West. Drugg., 13, p. 11.

Results of a comparative study of the therapeutic value of the various species of Buchu.

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(Editor.)

1891

Buchu leaves.

Pharm. Rec., 12, p. 172.

Prognosticates an increase in the price of Buchu because of scarcity of help.

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Luerssen, C.

1892

(*Barosma betulina*.)

Medicinisch Pharm. Botanik, etc. v. 2, p. 685. (Kohler's  
Medizinal Pflanzen, 3, p. 63.)

The original was not available.

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Schimmel & Co.

1893

Buchu Oil.

Semi-Ann. Report, Oct. 1893, p. 8. (Wood & BaWall, U. S.  
Dispens., 21 ed., p. 240; King's, Amer. Dispens., 18 ed.,  
p. 373; Tschirch, A., Handbuch Der Pharmakognosie, 1 ed.,  
v. 2, p. 1171; Kohler's Medizinal Pflanzen, 3, p. 63.)

Mentions the diosphenol content in Oil of Buchu.

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Engler, A. & Prantl, K.

1894

*Barosma*

Engler & Prantl, Die Pflanzen-familier, 3 ed., v. 4, p. 267.  
(Handbuch der Pharmakognosie, 1 ed., v. 1, p. 1171.)

Gives a detailed technical description of the  
genus and several species.

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Lucas, E. W.

1894

Laboratory Notes: Buchu.

Pharm. Jour., 53, p. 665.

Among other drugs, the oil glands of Buchu leaves  
are discussed.

Sayre, L. E.

1895

Buchu.

Manual of Organic Materia Medica and Pharmacognosy, 1 ed.,  
p. 174.

Gives botanical characteristics, habitat, description,  
constituents, actions and uses of Buchu.

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Umney, J. C.

1895

Empleurum Serrulatum (False Buchu.)

Chem. & Drugg., 46, p. 375. (Brit. & Col. Drugg., 27, p. 275;  
Pharm. Jour., 54, p. 796; Wood, Remington & Sadtler, U. S.  
Dispens., 19 ed., p. 249; Ibid., 20 ed., p. 243.)

Attention is called to the adulteration of Buchu  
with the leaves Empleurum Serrulatum. The presence of a  
fruit is a key to the occurrence of the substitution. Qual-  
itative and quantitative analysis of the adulterant is  
emphasized.

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Waggaman, S.

1895

Buchu.

A Compendium of Botanic Materia Medica, p. 173.

Gives botanical origin, description, constituents  
and uses of Buchu.

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Zenetti, P.

1895

Das Vorkommen von Hesperidin in Folia Bucco und  
Seine Krystallformen.

Archiv der Pharm., 233, p. 104. (Yrbk. Br. Pharm. Conf., 33,  
p. 118; Tschirch, A., Handbuch Der Pharmakognosie, 1 ed.,  
v. 2, p. 1171; Zornig, H., Arzneidrogen, 2 ed., p. 172.)

Reports that the yellowish brown crystals of  
hesperidin are found between the two epidermal layers when  
dried leaves are placed in any liquid.

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## Chemische Untersuchung der Folia Bucco.

Pharm. Zeit. f. Russe., 35, p. 353, 417, 433, 450. (Tschirch, A., Handbuch der Pharmakognosie, 1 ed., v. 1, p. 1171; Zornig, H. Arzneidrogen, 1 ed., p. 172; Kohler's Medizinal Pflanzen, 3, p. 63.)

Investigates Buchu leaves in detail and summarizes his results as follows: the volatile oil consists primarily of 3 constituents, one of which is crystalline, is an aldehyde phenol, and the other 2 liquid, a ketone isomeric with menthone and a terpene.

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Konkakow, I.

1896

Ueber die Zusammensetzung des Atherischen Oeles der Buccoblatter.

Jour. f. prakt. Chemie., N. F., v. 54, p. 433. (Zornig, H., Arzneidrogen, 1 ed., v. 1, p. 172.)

Discusses the chemistry of the aldehyde phenol, disophenol and gives data from numerous experiments on the compounds found in the volatile oil of Buchu leaves.

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Dohme, A.

1897

Buccoblatter.

Justs' Botanischer Jahresberichte, 25, p. 520. (Tschirch, Handbuch der Pharmakognosie, 1 ed., v. 1, p. 1171.)

Describes the leaves of *Barosma crenata*, *B. crenulata*, *B. betulina*, *B. serratifoliam*, and *Empleureum serrulatum*.

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The Histology and Pharmacognosy of Buchu Leaves.

Drugg. Circ., 41, p. 100. (Mercks Rep., 6, p. 370; Pharm. Jour., 94, p. 274; Dig. Comm. U.S.P. & N.F., 1890-1900, p. 33; Tschirch, Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171; Zornig, H., Arzneidrogen, 2 ed., p. 172; Just's Botanischer Jahresberichte, 25, p. 520.)

A discussion of the various species of Buchu leaves with illustrations, information concerning their therapeutic values.

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

1898

Buchu.

King's, Am. Dispens., 18 ed., v. 1, p. 373.

Gives the botanical source, history, description, chemical composition, action, medical uses, doses, and mentions the use of Buchu.

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Kraemer, H.

1898

Qualitative Examination of Powdered Vegetable Drugs.

Proc. Am. Pharm. Assoc., 46, p. 297. (Dig. Comm. U.S.P. & N. F., 1890-1900, p. 51.)

Outlines a method for the qualitative examination of powdered Buchu.

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Pabst, G.

1898

Barosma betulina.

Kohler's Medizinal Pflanzen, v. 3, p. 63.

Gives botanical classification, habitat, related species, part official, anatomy, constituents, uses, bibliography with a full page colored illustration of various parts of the plant with an explanation.

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(Buchu.)

Materia Medica Museum of the Brit. Pharm. Society, v. -, p. -.  
(Proc. Am. Pharm. Assoc., 48, p. 620.)

Reports substitution of Buchu leaves with those of  
Adenandra fragrans, Agathosma cerefolium, A. microphylla, A.  
ericoides, Diosma ericoides, D. oppositifolia, D. succulenta,  
and Barosma Eckloniana.

The Materia Medica of the Society's Museum. Buchu  
leaves.

Pharm. Jour., 64, p. 70. (Wood, Remington & Sadlter, U. S.  
Dispens., 19 ed., p. 249; Ibid., 20 ed., p. 243; Dig. Comm.  
U.S.P. & N.F., 1890-1900, p. 51; Tschirch, Handbuch Der  
Pharmakognosie, 1 ed., v. 2, p. 1171.)

Describes the displays of Buchu in the museum, then  
enters into a discussion of the chemical properties of  
diosphenol found in Buchu.

The Ash of B. P. Drugs.

Pharm. Jour., 65, p. 110. (Dig. Comm. U.S.P. & N.F., 1900,  
p. 51.)

Gives the ash content of Buchu as 4.4 and 4.8 %.

Cape Drugs.

Chem. & Drugg., 58, p. 643.

Buchu exports from South Africa in 1898-99 were  
valued at 2,038-1 and 2,0566-1 respectively.

The War and Its Effect on the Buchu Crop.

Pharm. Jour., 66, p. 240.

Discusses the effect of Martial law on the natives who gather the Buchu in Africa.

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Greenish, H. G. & Collin, E.

1902

Vegetable Powders and Their Diagnostic Characters.  
Buchu Leaves.

Pharm. Jour., 68, p. 3.

Among other drugs, drawings of Buchu leaves are given with a short discussion.

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Kraemer, H.

1902

Buchu.

A Course in Botany and Pharmacognosy, p. 209.

Gives description, constituents, allied plants, and the adulterant, *Empleurum serrulatum*, of Buchu leaves.

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Runge, P.

1902

Ueber Diosmal.

Pharm. Centralh., 43, p. 465. (Tschirch, Handbuch Der Pharmakognosie, 1 ed., v. 1, p. 1171.)

Gives a lengthy discussion on Diosmin and buchu camphor emphasizing their chemistry and therapeutics.

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Schulze, H.

1902

Beitrage zur Blattantomie der Rutaceen.

Botanisches Centralblatt., 90, p. 116. (Tschirch, Handbuch der Pharmakognosie, 1 ed., v. 1, p. 1171; Beihefte zum Botanischen Centralblatt, 12, p. 55.)

Describes the anatomy of various leaves in the Rutaceae family including *B. crenulata*, *B. serratifolia*, and *B. betulina*.

Buchu Leaves.

Pharm. Jour., 71, p. 748.

A description of the drug is given with comparisons of the several species.

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Gadd, W. H.

1904

Buchu Leaves.

Drugs, Their Production, Preparation and Properties, 1, p. 50.

Mentions the characteristics, properties and preparations of Buchu.

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Holmes, E. M.

1904

False Buchu.

Pharm. Jour, 73, p. 893. (Proc. Am. Pharm. Assoc., 53, p. 644.)

Tells of substitutes for Buchu, namely: *Agathosma imbricata*, *A. virgata*, *Coleonema album*, *C. pulchrum*, and *Macrostylis squarrosa* all of which have subulate leaves. Mentions *Diosma succulenta* as a recent substitute for Buchu.

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Sage, G. E.

1904

Karoo Buchu.

Chem. & Drugg., 65, p. 506. (Proc. Am. Pharm. Assoc., 53, p. 644; Remington & Wood, U. S. Dispens., 20 ed., p. 243; Ibid., 21ed., p. 240; Tschirch, Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171; Zornig, Arzneidrogen, 2 ed., p. 172.)

Briefly describes a sample of Buchu resembling *Barosma betulina*; also supplies observations, qualitative and quantitative data based on experimentation.

## Some Adulterated Drugs Found in Alabama.

Proc. Mich. Pharm. Assoc., 24, p. 106. (Dig. Comm. U.S.P. & N. F., 1906, p. 107.)

Reports that short buchu leaves contained 7.85% and long buchu 20.33% of stems, wood, barks and pebbles.

(Editor.)

1907

## A False Buchu.

Chem. & Drugg., 71, p. 702. (Dig. Comm. U.S.P. & N.F., 1907, p. 183.)

*Barosma pulchella* is being substituted for Buchu. Gives brief history and description of the substitute. Indicates its use as a perfume by the Hottentots.

Holmes, E. M.

1907

## New Variety of Buchu Leaves.

Pharm. Jour., 82, p. 598. (Yrbk. Br. Pharm. Conf., 45, p. 225; Dig. Comm. U.S.P. & N.F., 1907, p. 183; Zornig, *Arzneidrogen*, 2 ed., p. 172.)

Attention is called to *Barosma pulchella* and its differences between *B. betulina*.

Kraemer, H.

1907

## Buchu.

A Textbook of Botany and Pharmacognosy, 2 ed., p. 602; *Ibid.*, 3 ed., p. 602; *Ibid.*, 3 ed., p. 602.

Gives botanical origin, description, constituents, allied plants, adulterants of long and short buchu.

Kramer, H.

1907

Folia Bucco.

Berichte der D. Pharm. Gesellsch., 17, p. 312. (Zornig, H.,  
Arzneidrogen, 1 ed., p. 172.)

Gives description, characteristics, constituents,  
and properties of Buchu leaves.

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(Editor.)

1908

A New Variety of Buchu.

Drugg. Circ., 52, p. 69.

Tells of a new substitute for Buchu on the London  
market.

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Farwell, A. O.

1908

Buchu.

Mercks Rep., N. Y., 17, p. 34. (Dig. Comm. U.S.P. & N.F.,  
1908, p. 201.)

Asserts that buchu during the past year has been  
imported with such an excessive amount of stems and other  
foreign matter intermixed as to render it unfit for use.

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Rusby, H. H.

1908

Report of Committee on the Drug Market.

Proc. Am. Pharm. Assoc., 56, pp. 768, 793. (Dig. Comm.  
U.S.P. & N.F., 1908, p. 201; Tschirch, Handbuch Der Pharm-  
akognosie, 1 ed., v. 2, p. 1171.)

Indicates the prevalence of spurious buchu in  
many shipments: other lots have large amount of stems.

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## Neues vom Drogenmarkt.

Pharm. Zentralhl., 49, p. 961. (Dig. Comm. U.S.P. & N.F., 1910, p. 52.)

Describes the adulterant for buchu previously recognized by Holmes as being probably derived from *Barosma pulchella*, and comments on his own earlier observations on another adulterant from a species of Buchu.

---

Rusby, H. H.

1909

## Buchu.

Midl. Drug., 43, p. 689. (Pharm. Era., 42, p. 633; Dig. Comm. U.S.P. & N.F., 1909, p. 285.)

Thinks that in relation to buchu, the allowable stem and fruit should be stated along with the character of the stems.

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Wall, O. A.

1909

## Buchu.

Notes on Pharmacognosy, 3 ed., p. 379; Ibid., 4 ed., p. 355; Ibid., 5 ed., p. 47.

Gives descriptions of long and short buchu with illustrations.

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Cape Correspondent.

1910

## Buchu Leaves.

Chem. & Drugg., 76, p. 358. (Dig. Comm. U.S.P. & N.F., 1910, p. 350; Tschirch, Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171.)

A note on the growth and cultivation of Buchu leaves in Cape Colony, and says that the buchu market is dependent on the American demand.

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(Editor.)

1910

A Buchu. Substitute.

Chem. & Drugg., 77, p. 17. (Dig. Comm. U.S.P. & N.F., 1910, p. 351.)

An undetermined substitute of Buchu is discussed with its characteristics and properties.

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(Editor.)

1910

Adulterated Buchu.

Chem. & Drugg., 49, p. 352. (Proc. Am. Pharm. Assoc., 59, p. 221.)

Tells of microscopic characteristics of stems in the powdered drug, recent substitutes, description and brief history of new adulterants of Buchu.

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(Editor.)

1910

Buchu.

Chem. & Drugg., 76, p. 703. (Dig. Comm. U.S.P. & N.F., 1910, p. 351; Tschirch, Handbuch Der Pharmakognosie, 1 ed., p. 1171.)

Discusses the stringency in the buchu market and gives statistics of production for several years back.

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(Editor.)

1910

Buchu.

Chem. & Drugg., 77, p. 622. (Dig. Comm. U.S.P. & N.F., 1910, p. 351.)

Discusses the high price of buchu leaves, and the investigations of Cape Agricultural Department as to the intrinsic value of the leaves.

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(Editor.)

1910

Buchu Substitutes.

Chem. & Drugg., 77, p. 49. (Proc. Am. Pharm. Assoc., 59, p. 222; Tschirch, Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171.)

Points out that a substitute of Buchu resembles *Barosma crenulata* but is *Psoralea bracteata* or another species of *Psoralea*, undetermined because N. S. Pillans and E. M. Holmes fail to agree.

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(Editor.)

1910

Detection of False Buchu.

Amer. Drugg. & Pharm. Rec., 57, p. 39.

Gives distinctions between Buchu leaves and false Buchu leaves, with illustrations.

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(Editor.)

1910

The Bucha Situation.

Brit. & Col. Drugg., 58, p. 193.

Notes the market shortage of short buchu and that the demand has been curtailed by the high price.

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Froembling, W.

1910

Buchu Substitute.

Chem. & Drugg., 77, p. 293. (Dig. Comm. U.S.P. & N.F., 1910, p. 351.)

In a letter identifies a Buchu substitute as being the leaves of *Psoralea bracteata*.

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## Folia Bucco.

Lehrbuch der Pharmakognosie, 2 ed., p. 183; 3 ed., p. 200;  
4 ed., p. 236.

Gives the botanical origin of the drug, description  
of each type of leaf and an illustration of each leaf.

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## A New Adulterant of Buchu.

Pharm. Jour., 85, pp. 69 & 464. (Am. Jour. Pharm., 82,  
p. 482; Remington & Wood., U. S. Dispens., 20 ed., p. 243;  
Ibid., 21 ed., p. 240; Yrbk. Br. Pharm. Conf., 28, p. 223;  
Dig. Comm. U. S. P. & N.F., 1910, p. 351; Montreal Pharm.  
Jour., 22, p. 5; Proc. Am. Pharm. Assoc., 59, p. 221;  
Tschirch, Handbuch Der Pharmakognosie, 1 ed., v. 1, p. 1171.)

*Psoralea obliqua* is discussed as a new adulterant  
of Buchu betulina.

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## A Practical Aspect of Standards.

Proc. Am. Pharm. Assoc., 58, p. 592. (Dig. Comm. U.S.P. &  
N.F., 1910, p. 351; Bull. Am. Pharm. Assoc., 6, p. 19.)

In connection with Buchu impurities, states that  
stems, twigs, etc. are introduced incidentally at the time  
of collection.

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## Ash Standards in Drugs.

Proc. Am. Pharm. Assoc., 58, p. 751. (Dig. Comm. U.S.P. &  
N.F., 1910, p. 352.)

Report finding 5.55% ash in a sample of long  
buchu leaves.

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Rusby, H. H. 1910

Buchu.

Chem. & Drugg., 76, p. 703.

Gives statistics on the importation of Buchu into the United States with comments.

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Rusby, H. H. 1910

The Necessity for State and Municipal Activity in the Purification of our Drug Supplies.

Drugg. Circ., 54, p. 6. (Dig. Comm. U. S. P. & N. F., 1910, p. 352.)

Points out that long buchu and spurious buchu may be stopped when sold under the name of buchu, but if labeled as such, it must be accepted.

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Rusby, H. H. 1910

The "Raid" Occurred.

Prac. Drugg., 27, p. 424. (Drugg. Circ., 54, p. 617; Dig. Comm. U.S.P. & N.F., 1910, p. 351.)

States that he has met with Buchu containing 23% of inert stems.

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Pearson, W. A. 1910

Buchu.

Proc. Penn. Pharm. Assoc., 33, p. 136. (Dig. Comm. U.S.P. & N.F., 1910, p. 351.)

Reports on a sample of Karoo Buchu from *Diosma succenta*.

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(Editor.)

1911

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Pharm. Jour., 87, p. 522. (Chem. & Drugg., 78, p. 854;  
Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Warns pharmacists of the occurrence of *Barosma venusta*, *B. pulchella*, *B. launceolata* and *Alexander fragrans* as substitutes for *B. betulina*.

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(Editor.)

1911

Buchu.

Chem. & Drugg., 78, p. 262.

Official notice that all Buchu is subject to inspection by officers while in transit in the Crown lands of Africa.

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(Editor.)

1911

Buchu-Collectors Tax.

Chem. & Drugg., 78, P. 167. (Ibid., 79, p. 962.)

Notice of an increase in tariff for the collection of Buchu from Forest Reserves on the Cape of Good Hope.

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(Editor.)

1911

Mounted Buchu Specimens.

Chem. & Drugg., 78, p. 614.

Messrs. H. Hymans & Co. have prepared mounted specimens, framed, showing the several types of genuine Buchu.

The Question of Standards.

Bull. Am. Pharm. Assoc., 6, p. 5. (Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Endorses the suggestion that the U.S.P. permit the presence of 10% of stems, twigs, and worthless leaves in Buchu leaves.

---

Evans Sons, Lescher & Webb.

1911

Buchu.

Annalytical Notes, 1911-12, p. 17. (Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Reports the morphological resemblances of *Barosma betulina* and *B. venusta*.

---

Holmes, E. M.

1911

Buchu leaves, Non-Official and Spurious.

Pharm. Jour., 87, p. 522. (Yrbk. Br. Pharm. Conf., 49, p. 246.)

Indicates that *Barosma venusta* and *B. lanceololata* are often substituted for *B. betulina* whenever the latter becomes scarce.

---

Lilly, J. K.

1911

Report of Committee on Local Associations.

Proc. N.W.D.A., 37, p. 161. (Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Reports that good short Buchu has been scarce and high and that the revisers of the U.S.P. proposes to allow the use of long Buchu.

---

Lloyd, J. U.

1911

Buchu.

Bull. Lloyd Libr., 18, p. 10. (Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

States that the Hottentots used the leaves of the Buchu plant as a domestic remedy and from them the colonists derived their information concerning it.

---

Mansfield, W.

1911

Adulteration of Buchu.

Drugg. Circ., 55, p. 240; (Ibid., 56, p. 663; Proc. Am. Pharm. Assoc., 59, p. 223.)

Discusses in detail the microscopy of Buchu.

---

Miller, A. W.

1911

Leaves, Buchu.

Proc. N.W.D.A., 37, p. 91. (Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Reports that samples of Buchu have been received from laboratories in London having a strong pronounced taste and a somewhat mint like flavor. Most likely the collectors pick leaves of other species of Barosma.

---

Pillans, N. S.

1911

Another Buchu.

Chem. & Drugg., 78, p. 50. (Proc. Am. Pharm. Assoc., 59, p. 222.)

Tells of identification of another plant yielding Buchu as *Barosma venusta*.

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## The Collection of Buchu.

Chem. & Drugg., 78, p. 300.

In a letter, dispels the rumor, and prognosticates a ready supply of Buchu.

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Rusby, H. H.

1911

## Buchu.

Oil, Paint & Drug. Rep., 80, p. 28. (Proc. N.Y. Pharm. Assoc., 33, p. 288; Midl. Drugg., 45, p. 343; Dig. Comm. U.S.P. & N.F., 1911, p. 261.)

The readmission of long buchu to the U.S.P. and its strict regulation is strongly called for by the present drug market conditions.

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Rusby, H. H.

1911

## Buchu.

Proc. Vermont Pharm. Assoc., 18., p. 83. (Pharm. Era, 44, p. 95; Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Reports having frequently seen buchu leaves to which had been added, their own weight of stems, chopped as fine as coarse sand.

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Schimmel & Co.,

1911

## Buchu Leaf Oil.

Semi-Ann. Rep., Oct. 1911, p. 23. (Proc. Am. Pharm. Assoc., 59, p. 223; Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Report that Buchu leaves of unimpeachable quality have been obtained only at fancy prices.

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Thurston, T. C. & Thurston, J. D.,

1911

Buchu.

Proc. Ohio Pharm. Assoc., 33, p. 70. (Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

In discussing the requirements for powdered drugs, data on buchu are given.

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True, R. H.

1911

Buchu.

Proc. N.W.D.A., 37, p. 169. (Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Reports that experiments have been made in the cultivation of Buchu in Africa. The chief difficulty is in selecting seeds.

---

Wiley, H. W.

1911

Buchu.

Ann. Rep. U. S. Dept. Agric., 176, p. 16. (Dig. Comm. U.S.P. & N.F., 1911, p. 270.)

Reports Buchu leaves as containing a large excess of stems.

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Zornig, H.

1911

Folia Bucco.

Arzneidrogen, 1 ed., v. 1, p. 172.

Gives botanical origin with a description of several species, constituents, and histology of Buchu with references.

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Biebinger, D. L.

1912.

Report of Committee on Prevention of Adulteration.

Proc. N.W.D.A., 138, p. 239. (Dig. Comm. U.S.P. & N.F., 1912, p. 216.)

States that if some of the state authorities would introduce the rule of reason, adopted by the Federal authorities in admitting long buchu, much unnecessary trouble would be avoided.

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Evans, E.

1912

Necessity of Care in Collection of Drugs.

Yrbk. Brit. Pharm. Conf., 49, p. 395. (Dig. Comm. U.S.P. & N.F., 1912, p. 216.)

Carelessness in the collection of drugs is evidenced in long buchu leaves, where the leaves of *Barosma serratifolia* are often found mixed with the leaves of another species which may be distinguished by not having the serrated margin.

---

French, H. B.

1912

The Drug Market.

Jour. Am. Pharm. Assoc., 1, p. 835. (Dig. Comm. U.S.P. & N.F., 1912, p. 215.)

States that manufactures of official Buchu products are using long buchu in preference to short buchu in anticipation that the U.S.P. will make the long buchu official.

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Kebler, L. F.

1912

Inadequate Standards.

Am. Jour. Pharm., 84, p. 501. (Jour. Am. Pharm. Assoc., 1, p. 1405; Dig. Comm. U.S.P. & N.F., 1912, p. 215.)

States that the pharmacopoeial standard for buchu leaves makes no provision whatever for the presence of any stems or other incidental foreign material. In practice it has found necessary to allow a certain amount of the foreign material referred to.

Kebler, L. F.

1912

Necessity of Care in Collection of Buchu.

Jour. Am. Med. Assoc., 59, p. 1604. (Yrbk. Brit. Pharm. Conf., 49, p. 395; Dig. Comm. U.S.P. & N.F., 1912, p. 215.)

It has been a common practice to offer mixtures of buchu leaves with large quantities of twigs and stems collected indiscriminately.

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Mansfield, W.

1912

Klip Buchu. Occurrence in our commerce as an adulterant of Buchu.

Proc. N. Y. Pharm. Assoc., 34, p. 297. (Yrbk. Am. Pharm. Assoc., 1, p. 196; Chem. & Drugg., 81, p. 546; Yrbk. Brit. Pharm. Conf., 50, p. 262; Dig. Comm. U.S.P. & N.F., 1912, p. 216; Drugg. Circ., 55, p. 240.)

Reports a 17% Klip Buchu adulterant for long Buchu. Stresses the need of a pharmacognost for the dealers in drugs. Gives illustrations of the leaves.

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Miltacher, W.

1912

*Barosma betulinum*.

Die offizinellen Pflanzen und Drogen, p. 38.

Gives botanical origin, synonyms and constituents of Buchu leaves.

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Rusby, H. H.

1912

Buchu.

Jour. Am. Pharm. Assoc., 1, p. 374, (Dig. Comm. U.S.P. & N.F., 1912, p. 215.)

Indicates that the demand for buchu U.S.P. has exceeded the supply and the price has been exceedingly high.

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Swain, R. L.

1912

The Significance of Some Plant Names.

Drugg. Circ., 56, p. 63. (Dig. Comm. U.S.P. & N.F., 1912, p. 215.)

States that, "Buchu is a native African name."

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Young, W. L.

1912

Notes on the Botany of Medicinal Plants.

Am. Jour. Pharm., 84, p. 259. (Dig. Comm. U.S.P. & N.F., 1912, p. 215.)

With a dissertation on other plants, tells of the botanical sources of Buchu.

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Harvey, R. B.

1913

A Recent Buchu Adulterant.

Jour. Am. Pharm. Assoc., 2, p. 1305. (Yrbk. Am. Pharm. Assoc., 2, p. 216; Yrbk. Brit. Pharm. Conf., 51, p. 187; Pharm. Jour., 90, pp. 505 & 511; Dig. Comm. U.S.P. & N.F., 1913, p. 216.)

Directs attention to 2 new adulterants of Buchu. Describes and gives the characteristics of the unidentified variety believed to grown in Buchu fields.

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Haygood, W. A.

1913

Buchu.

U.S. Cons. & Tr. Rep., 56, p. 858. (Dig. Comm. U.S.P. & N.F., 1913, p. 215.)

The Union of S. Africa produced 88,419 pounds of buchu in the year ending April 30, 1911.

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Exhausted Buchu Leaves.

Pharm. Jour., 91, p. 34. (Dig. Comm. U.S.P. & N.F., 1913, p. 215.)

Warns that exhausted buchu leaves are often mixed with the fresh leaves.

---

Janisch, N.

1913.

The Collection of Buchu, Draft Ordinance.

Buchu Protection Ordinance, -, p. -. (Brit. & Col. Drugg., 64, p. 194.)

Draft ordinance for the protection of growers and collectors of *Barosma betulina*, *B. crenulata*, and *B. serratifolia* is printed completely.

---

Jensen, R. H.

1913

Examination of the Leaves of *Barosma Venusta*.

Pharm. Jour., 90, p. 60. (Am. Jour. Pharm., 85, p. 127; Dig. Comm. U.S.P. & N.F., 1913, p. 216; Evans, Analytical Notes., No. 7, 1912, p. 15.)

Reports after comparative study that *Barosma venusta* leaves and oil will not clinically compare with that of *Barosma betulina* and *B. serratifolia*.

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Kebler, L. F.

1913

Report of the Committee on Drug Market.

Jour. Am. Pharm. Assoc., 2, p. 1087. (Proc. Assoc. Off. Agric. Chem., 29, p. 192; Bull. Bur. Chem. U. S. Dept. Agric., 1913, p. 162.)

Among other drugs, notes that the sample of Buchu contained 45.5% of stems, twigs, etc.

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Mansfield, W.

1913

Report of Committee on Drug Market.

Jour. Am. Pharm. Assoc., 2, p. 679. (Dig. Comm. U.S.P. & N.F., 1913, p. 216.)

"Long Buchu is sometimes adulterated with Klip Buchu from *Diosma fragrans*."

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Rusby, H. H.

1913

Report of the Committee on Drug Market.

Jour. Am. Pharm. Assoc., 2, p. 1087. (Dig. Comm. U.S.P. & N.F., 1913, p. 215.)

Reports an excess of stems in Buchu on the market.

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Rusby, H. H.

1913

Supplementary Report, Buchu.

Jour. Am. Pharm. Assoc., 2, p. 685.

The high price of buchu continues to tempt the addition of excessive amounts of stem and sand.

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Schimmel & Co.

1913

Buchu Leaves Oil.

Semi-Ann. Rep., 1913, p. 34. (Dig. Comm. U.S.P. & N.F., 1913, p. 215.)

States that the difficulties in the way of procuring buchu suitable for distilling, still remain unsurmountable.

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Small, J.

1913

A New Adulterant of Buchu.

Pharm. Jour., 90, p. 511. (Brit. & Col. Drugg., 63, p. 326.)

Discusses the characteristics of an adulterant for *Barosma betulina*.

The Cultivation of Buchu.

Agric. Jour. Union of S. Africa, 6, p. 80. (Am. Jour. Pharm., 93, p. 48; Chem. & Drugg., 83, p. 403; Ibid., 93, p. 1580; Yrbk. Am. Pharm. Assoc., p. 215; Brit. & Col. Drugg., 64, p. 346; Yrbk. Brit. Pharm. Conf., 56, p. 250; Dig. Comm. U.S.P. & N.F., 1913, p. 215.)

Discusses the cultivation of Buchu in South Africa. Because of the destruction of Buchu by the natives who cut the Buchu plant with a scyth and so uproot many of the plants. Fires also destroy the seedlings.

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1914

Drugs and Their Preparations, Buchu.

Southern Pharm. Jour., 6, p. 354. (Dig. Comm. U.S.P. & N.F., 1914, p. 209.)

Gives a description of buchu; with illustrations it depicts the structural appearance of short and long buchu leaves and of the flowering branches of the shrubs yielding them.

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Baker, W. L.

1914

Buchu.

Proc. Am. Assoc. Pharm. Chem., p. 210. (Dig. Comm. U.S.P. & N.F., 1914, p. 210.)

Reports a large percentage of stems were found to be present in a sample of short buchu.

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(Editor.)

1914

Buchu.

Pharm. Era, 47, p. 155.

The proposed monograph for long and short buchu of the U.S.P. X is given.

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(Editor.)

1914

Long Buchu or Short Buchu.

Drugg. Circ., 57, p. 604. (Brit. & Col. Drugg., 65, p. 513; Dig. Comm. U.S.P. & N.F., 1914, p. 209.)

Discusses which kind of Buchu should be included in the U.S.P. IX.

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(Editor.)

1914

Note on a New Kind of Buchu.

Per. & Ess. Oil Rec., 5, p. 373. (Remington & Wood, U. S. Dispens., 20 ed., p. 243; Ibid., 21 ed., p. 240; Dig. Comm. U.S.P. & N.F., 1914, p. 209.)

Gives data on the character of the volatile oil from the leaves of *Barosma venusta* as compared with the official buchu.

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(Editor.)

1914

The Buchu Situation.

Brit. & Col. Drugg., 65, p. 491. (Oil, Paint & Drugg. Rep., 85, p. 9; Dig. Comm. U.S.P. & N.F., 1914, p. 209.)

A prognostication of reduced exports of Buchu is made for 1914.

---

Lilly, J. K.

1914

Buchu.

Proc. N. W. D. A., 40, p. 262. (Oil, Paint, and Drug Rep., 86, p. 34; Dig. Comm. U.S.P. & N.F., 1914, p. 209.)

Notes a slight admixture of species of buchu not answering to the description of the U.S.P.

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Ash Content of Crude Drugs.

Jour. Am. Pharm. Assoc., 3, p. 424. (Dig. Comm. U.S.P. & N. F., 1914, p. 209.)

Among other drugs, Long Buchu was found to contain from 3.84 to 4.6% of ash; and short buchu from 4.75 to 5.24% ash.

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Remington, J. P. (Chairman.)

1914

## Abstract of Proposed Changes in the U.S.P. IX.

Jour. Am. Pharm. Assoc., 3, p. 367. (Abstr. Prop. Changes, Part 2, p. 9; Dig. Comm. U.S.P. & N.F., 1914, p. 209.)

Among other drugs, a revised pharmacopeial description is given on Buchu as it will appear in the ninth revision of the U.S.P.

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Rippletoe, J. R.

1914

## The Examination of Some Drugs.

Am. Jour. Pharm., 86, p. 436. (Dig. Comm. U.S.P. & N.F., 1914, p. 209.)

Among other drugs, gives statistics on the ash content of 10 samples of short buchu and 3 samples of long buchu.

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Rusby, H. H.

1914

## Report of Committee on Adulteration.

Proc. N. Y. Pharm. Assoc., 36, p. 117. (Dig. Comm. U.S.P. & N.F., 1914, p. 210.)

Notes that in 10 bales of buchu were found to consists largely of chopped stems and branches. The importer was allowed to remove the stems, but he had only 4.5 bales of material left.

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Schimmel & Co.,

1914

Buchu Leaf Oil.

Semi-Ann. Rep., 1914, p. 33. (Dig. Comm. U.S.P. & N.F., 1914, p. 209.)

States that the buchu plant appears to be rather difficult to cultivate, the cuttings do not take root readily; they thrive best in very sandy soil.

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Woodhead, L.

1914

The Tax on Buchu.

Chem. & Drugg., 84, p. 882.

Comments on excessive tax paid for Buchu, collected in Crown lands.

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Baker, W. L.

1915

Why Drugs Are Rejected.

Jour. Am. Pharm. Assoc., 4, p. 225. (Dig. Comm. U.S.P. & N.F., 1915, p. 202.)

Among other drugs it is indicated that in a sample of short buchu a large percentage of stems was found to be present.

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Harvey, R. B.

1915

Buchu.

Lillys Sci. Bull., No. 6, p. 253. (Dig. Comm. U.S.P. & N.F., 1915, p. 202.)

Gives a description of a new adulterant of Buchu leaves.

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Kraemer, H.

1915

Buchu.

Scientific and Applied Pharmacognosy, 1 ed., p. 441; 2 ed., p. 368; 3 ed., p. 418.

Gives description, structure, characteristics, constituents of Buchu with a short discussion of adulterants and allied plant leaves.

---

Penn, --,

1915

Henry T. Helmbold, "The Buchu King."

Philadelphia Evening Bulletin, v. -, p. -, (Am. Jour. Pharm., 88, p. 23; Remington & Wood, U. S. Dispens., 20 ed., p. 243.)

Gives a brief biography of Helmbold who rose from a poor boy to "king" via the exploitation of Buchu.

---

Schimmel & Co.

1915

Buchu Leaf Oil.

Semi-Ann. Re., Apr. 1915, p. 8. (Dig. Comm. U.S.P. & N.F., 1915, p. 202.)

Gives a table showing the exports of Buchu leaves from South Africa during the years 1907-12, inclusive.

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Zufall, C. J.

1915

A criticism of U.S.P. Descriptions of Vegetable Drugs. Buchu.

Jour. Amer. Pharm. Assoc., 4, p. 532. (Dig. Comm. U.S.P. & N.F., 1915, p. 202.)

States that it is impractical to obtain Buchu without some stems.

---

Buchu.

Service and Regulatory Announcements, v. 20, p. 58. (Am. Jour. Pharm., 89, p. 549; Yrbk. Am. Pharm. Assoc., 6, p. 178; Dig. Comm. U.S.P. & N.F., 1917, p. 169; Ibid., 1919, p. 193; Jour. Am. Pharm. Assoc., 8, p. 466.)

Tells of *Empleureum serrulatum* and *Barosma pulchellum* being substituted for Long and Short Buchu, respectively.

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Blair, T. S.

1917

Buchu.

Botanic Drugs, p. 110.

Comments on the therapeutic value of Buchu.

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(Editor.)

1917

Buchu Substitutes.

Am. Jour. Pharm., 89, p. 549. (Yrbk. Am. Pharm. Assoc., 6, p. 178.)

Reports the following adulterants and substitutes of three varieties of Buchu, *Empleurum serrulatum*, *Barosma pulchellum* and *B. crenulata* variety *latifolia*.

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Phillips, E. P.

1917

South African Jour. of Industries, v. -, p. -, (Chem. & Drugg., 90, p. 43.)

(Deals with the commercial varieties, chemistry, uses, collecting and curing, adulterants, cultivation, exports, prices, distillation and distribution of Buchu.)

Tschirch, A.

1917

Folium Buccu.

Handbuch Der Pharmakognosie, 1 ed., v. 2, p. 1171.

Lists synonyms for Buchu leaves, botanical origin, anatomy, pathology, chemistry, adulterants and history with references.

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(Editor.)

1918

Notes on the Cultivation of Buchu.

Pharm. Era, 51, p. 272. (Yrbk. Am. Pharm. Assoc., 7, p. 229.)

Discusses in detail the technique and care in cultivating long and short Buchu.

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1919

(Cultivation of Buchu.)

S. African Jour. Industries, 2, p. 748. (Am. Jour. Pharm., 93, p. 48; Chem. & Drugg., 93, p. 1580.)

(Gives a lengthy discussion of cultivation experiments in Buchu. Detail is given as to the types of soil and ecological conditions.)

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1919

(The Cultivation of Buchu in S. Africa.)

Imperial Institute Bulletin, 17, p. 588. (Am. Jour. Pharm., 93, p. 48; Chem. & Drugg., 93, p. 1580; Dig. Comm. U.S.P. and N.F., 1919, p. 193.)

(Measures taken to prevent the wholesale destruction of the Buchu plants are indicated. Comments on the cultivation of Buchu as the only sure way of insuring a constant supply.)

A Microscopical Method for the Quantitative Determination of Vegetable Adulterants.

Jour. Am. Pharm. Assoc., 8, p. 1032. (Dig. Comm. U.S.P. & N.F., 1919, p. 193.)

A microscopical method for the quantitative determination of vegetable adulterants in buchu is described and analytical data are given.



(Editor.)

1921

Buchu Leaves.

Am. Drugg. & Pharm. Rec., 69, p. 37.

Briefly discusses the uses, cultivation and market for Buchu leaves.



(Editor.)

1921

Export of Buchu Leaves.

Pharm. Jour., 106, p. 459.

Gives statistics and price fluctuations on exports of Buchu.



(Editor.)

1921

Cultivation of Buchu.

Pharm. Jour. 107, p. 308.

An account of the cultivation of Buchu is supplied by popular request.



Humphrey, J.

1921

Buchu Leaves.

Drugs In Commerce, p. 18.

Names the 3 varieties of Buchu, gives a description and characteristics along with their preparation for the market.



Lloyd, J. U.

1921

Buchu.

Pharmacopœial Vegetable Drugs, Chemicals and Preparations,  
V. 1, p. 32.

A brief history of the use of Buchu is given.

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Newcomb, E. L.

1921

Notes on Ash Yield of Buchu.

Jour. Am. Pharm. Assoc., 10, p. 849. (Yrbk. Am. Pharm.  
Assoc., 10, p. 215; Yrbk. Brit. Pharm. Conf., 59, p. 290.)

Data relative to the amount of ash in various  
commercial samples of Buchu are presented.

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Mathews, J. W.

1922

The Cultivation of Buchu.

Economic Bulletin on the Cultivation of Buchu. (Nat. Drugg.  
52, p. 197.)

Discusses the ground seed germination of seed,  
time and method of collection and yields of Buchu when  
cultivated.

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Knightly, F. W.

1923

(Sale of Cape Buchu.)

Union Government Gazette, v. -, p. -. (Chem. & Drugg., 99,  
p. 666.)

(Notice is given to tenderers of Buchu of the  
regulations in the harvest of the crop on Crown Forest  
Reserves.)

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Reutter, L.

1923

Folium et Oleum Barosmae.

Traite de Matiere Medicalle, p. 729.

Gives scientific names of the plants yielding the drug, habitat, description and constituents of the leaves particularly the constituents of the volatile oil.

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Wren, R. C.

1923

Buchu.

Potters Cyclopaedia of Botanical Drugs and Preparations, 3 ed., p. 46.

Tabulates the uses, preparations and description of Buchu leaves.

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DeWall, L.

1924

Assay of Buchu Leaves.

Pharmaceutish Weekblad., 61, p. 185. (Chem. & Drugg., 100, p. 892; Yrbk. Am. Pharm. Assoc., 13, p. 417; Nat. Drugg. 54, p. 374; Ibid., 57, p. 74; Yrbk. Br. Pharm. Conf., 61, p. 89.)

Describes 2 procedures for the assay of diosphenol in Buchu leaves.

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(Editor.)

1925

Buchu.

Chem. & Drugg., 102, p. 215.

Describes the 3 varieties of Buchu, their adulteration with the leaves of *Empleurum serrulatum*, constituents of the leaves and the exports from South Africa.

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Wallis, T. E.

1925

Buchu.

Practical Pharmacognosy, p. 20.

Gives the botanical origin and drawings of parts of the leaf of Buchu.

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Youngken, H. W.

1926

Buchu.

A Textbook of Pharmacognosy, 2 ed., p. 345.

Gives synonyms, botanical origin, impurities limit, habitat, description, production, distinction, histology, characteristics, constituents, and substitutes for Buchu with illustrations.

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Herail, J.

1927

Feuilles de Buchu.

Traite de Matiere Medicale Pharmacographie, 3 ed., p. 321.

Gives botanical origin of several types of Buchu leaves, their external characteristics, histological characteristics, chemical constituents, usages, and figures of 3 leaves and 2 cross sections.

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(Editor.)

1930

The Materia Medica of the Pharmacopoeia, Buchu Folia.

Pharm. Jour., 64, p. 224.

The history, characters, description and notes on Buchu are briefly presented.

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- Rusby, H. H., Bliss, A. R., & Ballard, C. W. 1930  
Buchu.  
The Properties and Uses of Drugs, p. 343.  
Gives botanical origin, synonyms, constituents  
uses and preparations of Buchu.
- 
- Cross, M. C. 1931  
Buchu Production in the Union of South Africa.  
Jour. Am. Pharm. Assoc., 20, p. 127.  
Estimates the Buchu crop to be smaller in 1930  
than in the preceding year.
- 
- Klein, G. 1932  
Buchu.  
Handbuch Der Pflanzenanalyse, v. 1, pp. 294, 296, 853, 858,  
860.  
Gives different synonyms and scientific names of  
several varieties of Buchu.
- 
- Wasicky, R. 1932  
Bucco.  
Lehrbuch der Physiopharmakognosie, 2 ed., p. 550.  
Gives botanical origin, description, histology,  
constituents and uses of Buchu.
- 
- Allen, S. & Sons Ltd. (1933)  
Buchu.  
The Romance of Empire Drugs, v. -, p. 26.  
Describes the plant, history, constituents, char-  
acteristics, properties of Buchu, and the collection from  
wild and cultivated plants.

Buchu Leaves.

A Text Book of Materia Medica, 6 ed., p. 34.

Discusses the botanical source, description, constituents, varieties, substitutes and uses of Buchu leaves.

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1892-1924.
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- Am(eric)an) Drug Clerk's Jour(nal), v. 1-6, 1887-1892.
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- Brit(ish) & Col(onial) Drugg(ist), v.12-84, 1887-1931.
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- Dig(est of) Comm(ents) (on the) U.S.P. & N.F., 1897-1921.
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- Drugg(ists) Circ(ular), v. 1-76, 1857-1932.
- Drug Trade Weekly, v. 1-61, 1918-1922.
- Drug News, v. 5-9, 1896-1917.
- Jour(nal of the) Am(eric)an) Pharm(aceutical) Assoc(iation),  
v. 1-21, 1912-1932.
- Jour(nal of) Mat(eria) Med(ica), v. 1-19, 1859-1879.
- Merck's Rep(ort), v. 2-31, 1893-1930.
- Merck's Archives, v. 1-16, 1899-1914.
- Midl(and) Drugg(ist), v. 1-10, 1899-1909.
- Midl(and) Drugg(ist and) Pharm(aceutical) Rev(iew), v. 43-60,  
1910-1926.
- Nat(ional) Assoc(iation of) Ret(ail) Drugg(ists) Notes, v. 1-17,  
1902-1914.
-

Nat(ional) Assoc(iation of) Ret(ail) Drugg(ists) Jour(nal),  
v. 18-50, 1914-1930.

Nat(ional) Assoc(iation of) Ret(ail) Drugg(ists) Notes,  
v. 1-55, 1902-1933.

(The) Nat(ional) Drug Clerk, v. 1-19, 1913-1931.

New Rem(edies), v. 1, 4-12, 1872, 1875-1883.

Nat(ional) Drugg(ists), v. 12-60, 1888-1930.

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Pharm(aceutical) Era, v. 1-68, 1887-1931.

Pharm(aceutical) Rec(ord), v. 3-18, 1883-1895.

Pharm(aceutical) Rev(iew), N.Y., v. 14-26, 1896-1908.

Pharm(azeutische) Runde (Chem., N.Y.), v. 1-13, 1882-1895.

Pharm(aceutical) Times, v. 1-5, 1846-1849.

Pharm(aceutical) Rev(iew), Balt., v. 1-2, 1892-1893.

Pharm(aceutical) Jour(nal), v. 1-129, 1842-1932.

Phil(adelp(ia) Coll(ege of) Pharm(acy), Bull(etin), v. 1-21,  
1908-1928.

Pract(ical) Drugg(ist), v. 1-50, 1892-1932.

Pro(ceedings of the) Am(eric)an Pharm(aceutical) Assoc(iaiton),  
v. 1-59, 1851-1911.

Quart(erly) Jour(nal and) Y(ea)r(b)oo(k of Pharm(acy), v. 1-4,  
1928-1931.

(The) Ret(ail) Drugg(ists), v. 1-6, 1895-1900; v. 10-12,  
1904-1905; v. 16-19, 1909-1912.

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v. 1-18, 1912-1929.

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UNITED STATES PHARMACOPOEIA ( O-X )  
(1820-1920)  
and  
NATIONAL FORMULARY ( I-V )  
(1888-1926)  
HISTORY  
of  
BAROSMA SPECIES YIELDING BUCHU

U.S.P. 1840, P. p. 21.

Diosma Buchu.

The leaves of *Diosma crenata*./

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U.S.P. 1850, P. p. 17.

Buchu. Buchu.

*Diosma*, U.S.Ph., 1840.

The leaves of *Barosma crenata*, and other/ species of *Barosma*.

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U.S.P. 1860, P. p. 20.

Buchu. Buchu.

The leaves of *Barosma crenata*, and of other/ species of *Barosma*.

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U.S.P. 1870, P. p. 21.

Buchu. Buchu.

The leaves of *Barosma crenata*, and of other species of *Barosma*.

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U.S.P. 1880, p. 58.

Buchu.

The leaves of *Barosma betulina* Bartling, *Barosma crenulata* Hooker, and/ *Barosma serratifolia* Willdenow. (Nat. Ord., Rutaceae, Diosmeae)./

About three-fifths of an inch (15 millimeters) long, roundish-obovate with a/ rather wedge-shaped base, or varying between oval and obovate, obtuse, crenate or/ serrate, with a gland at the base of each tooth, pale green, thickish, pellucid-punc/ tate; strongly aromatic, somewhat mint-like, pungent and bitterish./

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The leaves of *Barosma serratifolia* are about one inch (25 millimeters) long, linear- lanceolate, thinner than but other-wise like the preceding./

Preparation: Extractum Buchu Fluidum./

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U.S.P. 1890, p. 68.

Buchu.

Buchu.

The leaves of *Barosma betulina* (Thunberg) Bartling et Wendland./ and *Barosma crenulata* (Linne) Hooker. (Nat. Ord., Rutaceae)./

About 15 mm. long, roundish-obovate with a rather wedge-shaped base, or/ varying between oval and obovate, obtuse, crenate, or serrate, with a gland at/ the base of each tooth, dull yellowish-green, thickish, pellucid-punctate; odor/ and taste strongly aromatic, somewhat mint-like, pungent and bitterish./

Preparation: Extractum Buchu Fluidum./

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U.S.P. 1900, p. 78.

Buchu.

Buchu.

The dried leaves of *Barosma betulina* (Thunberg) Bartling and/ Wendland. (Fam. Rutaceae)./

About 15 mm. long, varying between oval and obovate, yellowish-green, apex/ obtuse, margin crenate or serrate with a gland at the base of each tooth, the/ base more or less wedge-shaped; coreaceous, both surfaces best with numerous/ slight projections; odor strong and characteristic; taste somewhat mint-like,/ pungent and bitterish./

Average Dose: 2 Gm. (30 grains)./

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Buchu.

Buchu.

The dried leaves of *Barosma betulina* (Thunberg) Bartling and Wend-land, known in commerce as Short Buchu; or of *Barosma serratifolia* (Curtis) Willdenow, known in commerce as Long Buchu (Fam. Rutaceae), without the presence of admixture of more than 10 per cent of stems or other foreign matter.

Short Buchu: Thomboidally oval or obovate; from 9 to 25 mm. in length and from 4 to 13 mm. in breadth; summit obtuse, and recurved; margin somewhat serrate or finely dentate with and oil gland at the base of each tooth; the base more or less wedge-shaped; color varying from vivid green to yellowish-green, occasionally a few olive-gray leaves; glandular-punctate; both surfaces; palpillose; under surface longitudinally striate; texture coriaceous; petiole 1 mm. in length; odor and taste characteristic, aromatic and mint-like.

Long Buchu: Linear-lanceolate, from 2.5 to 4 cm. in length and from 4 to 6 mm. in breadth; summit somewhat rounder or truncate with an oil gland at the apex; margin sharply serrate and glandular; otherwise resembling Short Buchu.

Stems in both Short and Long Buchu about 1 mm. in diameter, yellowish-green or brownish-red, cylindrical, longitudinally furrowed, with prominent leaf scars nearly opposite to each other giving the stems a jointed character.

The yield of ash does not exceed 4 per cent.

Preparation: Fluidextractum Buchu.

Average Dose: Metric, 2 Gm. - Apothecaries, 30 grains.

Buchu.

Buchu.

Buchu is the dried leaf of *Barosma betulina* (Thunberg) Bartling et Wendland, or of *Barosma crenulata* (Linne) Hooker, known in commerce as Short Buchu; or of *Barosma serratifolia* (Curtis) Willdenow, known in commerce as Long Buchu (Fam. Rutaceae).

(Cont.)

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Buchu contains not more than 8 per cent of its stems and not more/ than 2 per cent of other foreign organic matter./

#### Description and Physical Properties./

**Underground Short Buchu:** Rhomboidally oval or obovate, from 9 to 30 mm. in length/ and from 4 to 20 mm. in breadth; apex obtuse or rounded and sometimes re-/curved, base wedge-shaped or obtuse, margin finely dentate, glandular punc-/tate, with an oil gland at the base of each tooth, palpillose, long-itudinally/ striate beneath, coriaceous and with a petiole about 1 mm. in length; color bright green to yellowish-green, occasionally olive-gray; odor aromatic, and/ mint-like; taste camphoraceous./

**Underground Long Buchu:** Linear-lanceolate from 12 mm. to 4 cm. in length and/ from 4 to 10 mm. in breadth; apex acute, somewhat rounded; margin sharply/ serrate. Otherwise resembles Short Buchu./

**Structure:** Cuticle thick, somewhat uneven and striated; hairs few, simple,/ 1-celled, non-lignified, up to 0.145 mm. in length (Short Buchu), or 0.180 mm./ in length (Long Buchu). Stomata absent on the upper surface, numerous/ on the lower surface, broadly oval, up to 0.004 mm. in length and surrounded by/ from 4 to 6 neighboring cells; epidermal cells with inner walls mucilaginous and/ containing colorless spherocrystals or crystal aggregates of hesperidin which/ strongly polarize light, the latter form giving a brilliant display of colors; a/ single row of large hypodermal cells beneath the upper epidermis containing numerous plastids and a few rosette aggregates of calcium/ oxalate; oil cavities occurring mostly near the margin of the leaf, circular in/ outline and containing globules of oil. Fibro-vascular bundles of midrib and/ larger veins collateral, in crescent-shaped groups, composed chiefly of tracheae,/ sieve tubes and non-lignified fibers and separated by collenchyma from the/lower epidermis./

**Powdered Buchu:** Light green; elements of identification are epidermal cells con-/ taining spherocrystals or crystal aggregates of hesperidin, rosette aggregates/ or calcium oxalate from 0.015 to 0.030 mm. in diameter, a few simple hairs,/ lower tissue with numerous stomata, oil secretion cavities and oil globules,/ and fragments of the fibro-vascular bundles./

**Preparation:** Fluidextractum Buchu./

**Average Dose:** Metric, 2 Gm. - Apothecaries, 30 grains./

SUMMARY OF U.S.P. & N.F. DATA OF BUCHU

Official in:

U.S.P., 1840, '50, '60, '70, '80, '90, 1900, '10,  
'20.

Official Latin Title:

*Diosma Buchu*, U.S.P., 1840.

*Buchu*, U.S.P., 1850, '60, '70, '80, '90, 1900, '10,  
'20.

Official English Title:

*Buchu*, U.S.P., 1840, '50, '60, '70, '80, '90, 1900,  
'10, '20.

Official Abbreviation:

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Official Synonym:

\_\_\_\_\_

Scientific Name:

*Diosma crenata*, U.S.P., 1840.

*Barosma crenata*, U.S.P., 1850, '60, '70.

*Barosma betulina* Bartling, //

*Barosma crenata* Hooker, and // U.S.P., 1880.

*Barosma serratifolia* Willdenow. //

*Barosma betulina* (Thunberg) Bartling //  
et Wendland, and // U.S.P., 1890.

*Barosma crenulata* (Linne) Hooker. //

*Barosma betulina* (Thunberg) Bartling and Wendland.  
U.S.P., 1900.

*Barosma betulina* (Thunberg) Bartling //  
and Wendland, or of // U.S.P., 1910.

*Barosma serratifolia* (Curtis) Willdenow. //

(Cont.)

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Barosma betulina (Thunberg) Bartling //  
and Wendland, or of //  
Barosma crenulata (Linne) Hooker, or of // U.S.P., 1920.  
Barosma serratifolia (Curtis) Willdenow. //

Family:

Nat. Ord., Rutaceae Diosmeae, U.S.P., 1880.

Nat. Ord., Rutaceae, U.S.P., 1890.

Rutaceae, 1900, '10, '20.

Part Used:

The leaves, U.S.P., 1840, '50, '60, '70, '80, '90.

The dried leaves, U.S.P., 1900, '10, '20.

Preservation:

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Official Preparation:

Extractum Buchu Fluidum, U.S.P., 1880, '90.

Fluidextractum Buchu, U.S.P., 1910, '20.

Official Dose:

2 Gm. (30 grains) U.S.P., 1900.

Metric, 2 Gm.- Apothecaries, 30 grains. U.S.P., 1910,  
'20.

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APPROVED BY W. O. Richtmann

Assoc. Prof. of Pharmacognosy.