

(Bulbus squillae) BIBLIOGRAPHY OF SQUILL

Collectio Salernitana 3, p. 280. (Fluekiger, Pharmakognosie des Pflanzenreiches, 2, p. 588).

By

("Bulbus squilliticus, id est bulbus rufus")

AMOS BLAINE COLBY

Theophrastus, 370-285 B.C. (1916)
(Hart, A.S.)

Epimenides squill

Enquiry into Plants, B.VII, C.XIII. (Plinius, Nat. Hist. B.19, Ch.30)

The above named plant is said to be an edible squill.

A Thesis Submitted for the Degree of

BACHELOR OF SCIENCE

Plinius, C. 77 A.D. (1856)
(Pharmacy)

Bulbs, Squills, and drums

Natural History BXIX, C.30. (Fluekiger, Pharmakognosie, 2nd ed., p. 588).

Describes the squill bulb and discusses use and habitat.

Plinius, C. 77 A.D. (1856)

Squills

Natural History BXIX, C.39. (Fluekiger, Pharmakognosie, 2, p. 588).

Lists 23 remedial uses of squill.

UNIVERSITY OF WISCONSIN

Varro, M.F. 1940 1472

(Bulbus Scillae)

De Re Rustica, 1 ed., p. 7. (Fluekiger, Pharmakognosie Pflanzenreiches, 2 ed., p. 588).

The original was not available.

(Bulbus squilliticus)

Collectio Salernitana 3, p. 280. (Fluekiger, Pharmakognesie des Pflanzenreiches, 2, p. 588).

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(Bulbus Scillae)

De Re rustica, 1 ed., p. 7. (Fluekiger, Pharmakognosie Pflanzenreiches, 2 ed., p. 588.)

The original was not available.

Columella, L.J.M.

1523

(*Bulbus Scillae*)

De re rustica libri XII et liber. De arboribus, 23, p.--
(Fluekiger Pharmakognosie Pflanzenreiches, 2 ed., p. 588.

The original was not available.
The original was not available.

Bauhin, J.

1598

(*Scilla Maritima*)

Histori novi, etc., p. 615. (Woodville, Med. Bot.,
2 ed., p. 745.)

(Woodville, Med. Bot., 2 ed., p. 745.)

The original was not available.

The original was not available.

Clusius, C.

1601

(*Scilla Hispanica*)

Rariorum Plantarum Historia, V.1, p. 171. (Willdenow's,
Linne, Species Plantarum, 4 ed., v. 2, p. 126). Bot.,

Gives the history, habitat, names, and description
of squill with 2 illustrations.

name and the genus. Lists
two species, the red squill and white squill, giving
synonyms for each, also gives the habitat and the period
in which it flowers and matures.

Parkinson, J.

1629

(*Scilla Maritima*.)

Paradisi in sole Paradisus terrestria, p. 133.
(Woodville, Med. Bot., 2 ed., p. 745.)

The original was not available.
(Linne Species
Plantarum, 4 ed., V.2, p. 126.

Johnson, T.

1633

Pancretium Clusii.

The Herbal, p. 172. (Woodville, Med. Bot., 2 ed., p. 745.)

Gives description and habitat of the Great Squill or
Sea Onion with illustrations.

Bauhinus, C. 1671

Scilla radice alba.

Pinax. Theatri, 2 ed., p. 72. (Linne's Species Plantarum, 4 ed., V.2, p. 126).

Describes various species of squill, and that the squill used in medicine is white variety.

Reyen, A. 1740

Morison, R. 1680

Scilla radice tunicata
(Scilla Maritima)

Flora Leydensis, p. 32, Willdenow. (Linne Species Plantarum historiae universalis Oxeniensis, 1 ed., p.48. (Woodville, Med. Bot., 2 ed., p. 745.

The original was not available.

Linne, C. 1742

Raii, J. 1688

Scilla radice tunicata
De Scilla.

Hortus Upsalensis, p. 123. (Willdenow, Linne Species Historia Plantarum, p. 1164. (Woodville, Med. Bot., 2 ed., p. 745.)

The original was not available.

Gives a discussion of the name and the genus. Lists two species, the red squill and white squill, giving synonyms for each, also gives the habitat and the period in which it flowers and matures.

(Scilla Maritima)

Species Plantarum, 1 ed., p. 308. (Lindley, Flor. 1734)

Scilla radice alba.

Gives several scientific synonyms, with references Museum, V. 1, T.44, f. 4.5. (Willdenow). (Linne Species Plantarum, 4 ed., V.2, p. 126.

The original was not available. 1760

Scilla undiflora

Dictionary. Hortulan, N. 1.

(Willdenow, Linne Species Plantarum, 4 ed., V.2, p.126)

The original was not available.

Linne, C. 1737

(*Scilla Maritima*)

Genera Plantarum, 1 ed., p. 491. (Woodville, Med. Bot.,
2 ed., p. 745. 176. (Woodville, Med. Bot., 2 ed., p. 745.)

The original was not available.

Royen, A. G. 1740

Scilla radice tunicata

Flora Leydensis, p. 32, Willdenow. (Linne Species
Plantarum, 4 ed., V.2, p.126.

The original was not available.

Linne, C. 1742

Scilla radica tunicata

Hortus Upsaliensis, p. 123. (Willdenow, Linne Species
Plantarum, 4 ed., V.2, p.126). Harm., 1 ed., p. 628;

ibid., 2 ed., p. 630.

The original was not available.

Gives data on the early history of squill.

Linne, C. 1753

Linne, C. 1773

(*Scilla Maritima*)

Scilla maritima nudiflora
Species Plantarum, 1 ed., ;. 308. (Lindley, Flor. Med.,
p. 591). Medica, 2 ed., p. 94. (Willdenow, Linne's
Species Plantarum, 4 ed., V.2, p.126.

Gives several scientific synonyms, with references
and its habitat.

Gives botanical synonyms, habitat, preparations,
qualities, therapeutic action and diseases for which it
is used.

Miller, P. 1760

Scilla undiflora

Dictionar. Hortulan, N. 1.

(Willdenow, Linne Species Plantarum, 4 ed., V.2, p.126)

The original was not available.

Lange, J.H.

1765

(Scilla Maritima)

Tentamen medico-physico de remediis brunsvicensium domesticis, p. 176. (Woodville, Med. Bot., 2 ed., p. 745.)

The original was not available.

Ludwig, C.G.

1770

(Scilla Maritima)

Adversaria Medico-practica, v. 2, p. 695. (Woodville, Med. Bot., 2 ed., p. 745.)

The original was not available.

Holler, A.

1771

Scilla Maritima

Bibliotheca Botanica, p. 12. (Woodville, Med. Bot., 2 ed., p. 745;) Flück and Han. Pharm., 1 ed., p. 628; ibid., 2 ed., p. 630.

The original was not available.

Gives data on the early history of squill.

Quarin, J.

1786

Linne, C.V.

1772

(Scilla Maritima)

Scilla maritima nudiflora.

Animadversiones practicae in diversos morbos., p. 166.

Materia Medica, 2 ed., p. 94. (Willdenow, Linne's Species Plantarum, 4 ed., v.2, p.126.

The original was not available.

Gives botanical synonyms, habitat, preparations, qualities, therapeutic action and diseases for which it is used.

Moench, K.

1794

(Stellaris Scilla).

Methodus plantas, etc., p.304. (Lindley, Flor. Med., 1 ed., p. 591.)

The original was not available.

Blackwell, E. R.L.

1773

Scilla nudiflora.

Herbarium Blackwellianum, t. 591. (Willdenow, Linne Species Plantarum, 4 ed., v.2, p.126)

The original was not available.

Houltuyn, M. L.

1777

Scilla Hispanica

Pflanz. Syst., v.2, p. 354. (Woodville, Linne Species Plantarum, 4 ed., v.2, p.126.) and General Dispens.),

The original was not available.

Home, F.

1780

Redoute, (Scilla Maritima).

1802-16

Clinical Experiments and Histories, p.357. (Woodville, Med. Bot., 2 ed., p.745.)

(Les Liliacees, T.116. Lindley, Flor. Med., 1 ed., p.591)

The original was not available.

Quarin, J.

1786

Coxe, J.R. (Scilla Maritima)

1806

Animadversiones practicae in diversos morbas., p. 166. (Woodville, Med. Bot., 2 ed., p.745.) 1799, 6 ed., p.538,

7 ed., p.534; 8 ed., p.579, 9 ed., p.623.

The original was not available.

Moench, K.

1794

(Stellaris Scilla).

Methodus plantas, etc., p.304. (Lindley, Flor. Med., 1 ed., p. 591.)

The original was not available.

Desfontaines, R.L. 1798

(*Scilla Maritoma*) *Scilla maritima*. Dried Sea Squill.

Flora Atlantica, etc., v.1, p. 297. (Lindley, Flor. Med., 1 ed., v.1, p.591).

Gives the method used in drying squill, the advantages of method.
The original was not available.

Willdenow, C.L. 1799

(*Scilla Maritima*)

Linne Species Plantarum, 4 ed., v.2, p.126. (Dispens. U.S.A., 2 ed., p.594; Eclectic and General Dispens.), p.270. (Med., p.591.)

Gives botanical synonyms, habitat, and description of squill, physiological effects, medicinal uses, officinal preparations, and average dose of squill, with a colored illustration.

Redoute, P.J. 1802-16

(*Scilla Maritima*)

(Les Liliacees, T.116. Lindley, Flor. Med., 1 ed., p.591)

The original was not available.

Gives the method of preparation of powdered squill advantages.
Coxe, J.R. 1806

Scilla Maritima. *Scilla*

Am. Dispens. 1 ed., p.583; 4 ed., p.499, 6 ed., p.538, 7 ed., p.554; 8 ed., p.579, 9 ed., p.623.

Gives a list of foreign names, habitat, a description of the bulb, medical use, dose and officinal preparation of squill.

Gives the official and non-official synonyms, a description, qualities, medical properties and uses, and official preparations of squill.

Coxe, J.R. and Schultes, J.A. 1806

Scilla Maritima Exsiccata. Dried Sea Squill.

Am. Dispens., 1 ed., p. 583; 4 ed., p.500. (Lindley, Flor. Med., p.591.)

Gives the method used in drying squill, the advantages of method, and use of dried squill.

Woodville, W. 1810

Scilla Maritima

Medical Botony, 2 ed., p.745. (Dispens. U.S.A., 2 ed., p.594, Eclectic and General Dispens., p.270; Lindley, Flor. Med., p.591.)

Gives botanical synonyms, classification, description, habitat, physiological effects, medicinal uses, officinal preparations, and average dose of squill, with a colored illustration.

Scilla, U.S. Squill

Coxe, J.R. 1825

Pulvic Scillae. Powder of Squill.

Am. Dispens., 6 ed., p.538 to 7 ed., p.555; 8 ed., p.580, 9 ed., p.624.

Gives the method of preparation of powdered squill and its advantages.

An American Physician 1827

Scilla

Eclectic and General Dispens., 1 ed., p.270. (Flöckiger, Pharmacognosie Pflanzenreich, p.587.)

Gives the official and non-official synonyms, a description, qualities, medical properties and uses, and official preparations of squill.

Römer, J.J. and Schultes, J.A.

1829

(*Scilla Maritima*)

Linne's *Systema vegetabilium*, 7 ed., p.556. (Lindley, *Flor. Med.*, 1 ed., p.591).

Gives botanical synonyms, description, and habitat of squill.

Griffith, R.E.

1832

On the Vegetable Emetica of the United States

Am. Jour. Pharm., 4, p.286.

Squill is listed as having emetic properties.

Wood, B.G. and Bache, F.

1834

Carson, J. *Scilla*, U.S. Squill

Dispens. U.S.A., 2 ed., p.594; 3 ed., p.583; 4 ed., p.615; 5 ed., p.615; 5 ed., p.645; 6 ed., p.645; 7 ed., p.645; 8 ed., p.645; 9 ed., p.665; 10 ed., p.664; 11 ed., p.699; 12 ed., p.760; 13 ed., p.790; 14 ed., p.820; 15 ed., p.1290; 16 ed., p.1344; 17 ed., p.1209; 18 ed., p.1208; 19 ed., p.1102; 20 ed., p.983.

Gives official and non-official synonyms, general characteristics, properties, medical properties and uses, and official preparations of squill.

Scillitive

Wilkinson, H.O. *Annales de Chimie et Physique*, 3, v.24, p.63. (Flückiger, *Pharmakognesie Pflanzenreiches*, 2 ed., p.587.)

1837

(*Bulbus Scillae*)

Discusses the preparation of scillitive.
Manners and Customs of Ancient Egypt, p.63. (Flückiger, *Pharmakognesie Pflanzenreiches*, 2 ed., p.587.)

The original was not available.

Lindley, J. G.

1838

Compositae Squilla of Scilla Maritima.

Flora Medica, 1 ed., p.591, (Dispens. U.S.A., 5 ed., p.645.)

Gives the general characteristics of the flower and bulb and the medicinal uses of squill.

Wolfring

1842

Nicolaus, Damascenus

O.A.D. (1831)

(Case of Poisoning by squills)

Medicinische Correspondent-Blattbayerischer Aertz, 5.
(The Chemist, 3, p.318).

(Reports a case of the fatal poisoning from an excessive dose of vinous tincture of squills.)

Carson, J. H.

1847

(Scilla Maritima) ions

Illustration of Medical Botany, v.2, p.46, pl. 89.
(Dispens. U.S.A., 8 ed., p.645.)

The original was not available.

King, J. and Newton, R.S.

1852

Lebourdois, M.

1848

Scilla Maritima, Squill

Scillitive

Elect. Dispens. 1 ed., p.369.

Annales de Chimie et Physique, 3, v.24, p.63. (Flückiger,
Pharmalognesie Pflanzenreiches, 2 ed., p.587.)

Discusses the preparation of scillitive.

Tilloy, M.

1833

Memoire sur la scille

Jour. de Pharm. et de chim., 56, p.406. (The Chemist, 8.2,
v.4, p.513; Am. Jour. Pharm., 28, p.84.)

Reports on the analysis of squill, using 3 methods of analysis.

Willstein, G.C.

1850

Composition of Scilla Maritima.

Pharm. Jour. 10, p.359. (Flückiger, Pharmakognesie Pflanzenreiches, 3 ed., p.687).

A report of experiments with the fresh bulb and the preparation of the extract. Also gives the properties and medicinal uses of the dry bulb.

Pereira, J.

1854

Nicolans, Damascenus

O A.D. (1851)

Claginea Scilla.

(Bulbus Scillae)

Elements of Materia Medica and Therapeutics, v.2, 2 ed., De Plantis libri dua (Flückiger, Pharmakognesie Pharm., Pflanzenreiches, 2 ed., p.588.

The original was not available. (The original was not available. Description, constituents, botanical origin, of squill and its uses and preparations.)

Stabler, R.H.

1851

Dumas, M.

1855

Practical Observations

Production of Alcohol

Am. Jour. Pharm., 23, p.121.

Silliman's Jour., 69, p.413. (Amer. Jour. Pharm., 27, p.377).

Gives a method for powdering squill.

Squill is suggested as a source of saccharine matter for the production of alcohol.

King, J. and Newton, R.S.

1852

Boudet, F. Scilla Maritima, Squill

1857

Elect. Dispens. 1 ed., p.369. (Flückiger, Pharmakognesie Pharm., Pflanzenreiches, 2 ed., p.588. Jour. d. Pharm. et d.

Chim., 64, p.123. (The Chemist, 4, p.391; Amer. Jour. Pharm.,

29, p.61) Gives part used, history, properties and uses, and official preparations of squill.

In a thesis submitted to "l'Ecole supérieure de pharmacie de Paris", discusses the historical medicinal uses of squill, analyses, a microscopical examination of

Tilloy, M. He gives processes for the isolation of 1853

active principles, and describes severe toxicological experiment. Memoire sur la scille

Jour. de Pharm. et de chim., 56, p.406. (The Chemist, S.2, v.4, p.513; Am. Jour. Pharm., 26, p.84.)

Reports on the analysis of squill, using 3 methods of analysis.

Martiny, L.W.

1854

(Bulbus Scillae.)

Rohwaarenkunde, v.2, p.603. (Flückiger, Pharmakognesie Pflanzenreiches, 2 ed., p.587). Pharmacographia, 1 ed., p.629.

Ibid., 2 ed., p.693.

The original was not available.

The original was not available.

Pereira, J.

1854

Heldreich, F. V. (Bulbus Scillae)

Claginea Scilla.

Elements of Materia Medica and Therapeutics, v.2, 2 ed., p.202. Ibid., 1 Am. ed., v.2, p.115. (Am. Jour. Pharm., 26, p.176.)

Pharmacographia, 1 ed., p.698; Ibid., 2 ed., p.692.

Gives synonyms, history, description, constituents, botanical origin of squill and its uses and preparations.

Dumas, M.

1855

Production of Alcohol

Sillimans Jour., 69, p.413. (Amer. Jour. Pharm., 27, p.377).

15 ed., p.734; 16 ed., p.734.

Squill is suggested as a source of saccharine matter for the production of alcohol. Gives synonyms, a description, history, properties and uses, and official preparations of squill.

Boudet, F.

1857

Schroff, Recherches sur la scille. Jour. d. Pharm. et d.

Chim., 64, p.123. (The Chemist, 4, p.391; Amer. Jour. Pharm.,

29, p.361.) (Bulbus Scillae)

In a thesis submitted to "l'Ecole superieure de pharmacie de Paris", discusses the historical medicinal uses of squill, analyses, a microscopical examination of the bulb. He gives processes for the isolation of the active principles, and describes severe toxicological experiments on squill. to scillitin.

Poppe, F.F. 1857

(Urginea Altissima) crystals in Certain Vegetable
Drugs. Am. Jour. Pharm., 37, p.32.
Florae Medical Copensis Prodomus, 2 ed., p.41.
(Flückiger, and Hanburg, Pharmacographia, 1 ed., p.629.
Ibid., 2 ed.; p.693.

The original was not available.

Schreff, K. 1865

Heldreich, T. Vag zur noheran Kerntziss der Meerzw 1862

Zeitschrift (Bulbus Scillae) eichischen. Apotheker-Vereins,
3, pp. 935-37, 85, and 4, p.107. (Flückiger, Pharmakognosie,
Nutzpflanzen Griechenlands, 1 ed., p.7. (Flückiger and
Hanburg, Pharmacographia, 1 ed., p.628; Ibid., 2 ed., p.692.
A description is given of squill, with comments on
the (Reports the use of squill for the preparation of
alcohol.

Covell, T.J. 1867

King, J. 1864
A contribution to the statistics of Drug Powdering.
Scilla Maritima, Squill

Amer. Jour. Pharm., 39, p.116.
Amer. Dispens. 6 ed., p.852; 8 ed., p.754; 10 ed., p.754;
15 ed., p.754; 16 ed., p.754. squill.

Gives official and non-official synonyms, a description,
history, properties and uses, and official preparations
of squill. 1868

A Poison for Rats

Schroff, K. (Arm. Jour., 38, p.326). Am. Jour. Pharm. 1864,
p.332.

(Bulbus Scillae)

Tells about the use of the bulb Scilla Maritima as
Zeitschrift der Gesellschaft der Aergte zu Wein, 42, p.
(Flückiger, and Hanburg, Pharmacographia, 1 ed., p.629,
Ibid., 2 ed., p.693.

Reports the presence of a non-volatile active principle
(Skulein) in addition to scillitin.

- Mayer, F.F.V. 1865
 The Rhaphides or Crystals in Certain Vegetable
 Drugs. Am. Jour. Pharm., 37, p.32.
 Refugium Botanicum, v.3, p.12. (Flückiger and Hanburg,
 1 ed. Crystals found in squill are said to be calcium
 oxalate.
 The original was not available.
- Schroff, K. 1865
 Rother, R. 1871
 Beitrag zur noheran Kerntriss der Meerzwiebel
 Squill.
 Zeitschrift des osterreieheichischen. Apotheker-Versins,
 3, pp. 938-57,85, and 4, p.107. (Fluckiger, Pharmakognesie,
 Pflanzenreiches, 2 ed., p.585.)
 Discusses the active principles of squill and outlines
 as the A description is given of squill, with comments on
 the history, use, commerce and constituents of squill.
- Covell, T.J. 1867
 A contribution to the statistics of Drug Powdering.
 Am. Jour. Pharm., 39, p.116, p.221. (Flückiger, and
 Hanburg Pharmacographia, 1 ed., p.637; Ibid., 2 ed., p.690.)
 Gives data on powdering squill.
 The original was not available.
- McIntyre, A. 1868
 1872
 A Poison for Rats
 Minutes of the Pharmaceutical Meeting.
 Times, (Pharm. Jour., 28, p.326). Am. Jour. Pharm., 41,
 p.352. ur. Pharm., 44, p. 522.
 Tells about the use of the bulb Scilla Maritima as
 a poison for rodents and also gives a method of preparation
 of the bulbs to be used for this purpose.
- Pecklington, H. 1872
 The Microscope in Pharmacy, Scilla.
 Pharm. Jour. 32, p.281.
 Describes the cellular structure of the dried bulb of
 Urginea Scilla and especially as observed in the powder.

Saunders, G.V. and Hanburg, D. 1870

(*Scilla Indica*)

Refugium Botanicum, v.3, p.12. (Flückiger and Hanburg, 1 ed., Pharmacographia, p.629, Ibid., 2 ed., p.693.)

The original was not available. cal origin, history, description, microscopic structure, chemical composition, commerce, use and substitutes for squill.

Rother, R. 1871

Husemann, Squill. 1875

Chicago Pharmacist, 4, p.243. (Pharm. Jour., 31, p.629.)

Discusses the active principles of squill and outlines methods for preparing the vinegar and the fluid extract of squill. see the physiological properties of the bulb of *Scilla maritima*.

1872

Chipman, E.D. 1876

(*Bulbus Scillae*)

On Squill

Jour. of Linn. Soc. Bot., 13, p.221. (Flückiger, and Hanburg Pharmacographia, 1 ed., p.627; Ibid., 2 ed., p.690.)
 Jour. Pharm., 48, p.444.

The original was not available.

Reports the existence of 2 active principles in the bulb of *Scilla maritima*.

McIntyre, A. 1872

(Correspondence) Minutes of the Pharmaceutical Meeting. 1876

Am. Jour. Pharm., 44, p.522.

Drugg. Reports an exhibition of squills by Prof. Maisch.

Gives a method for powdering squill in wet weather.

Pocklington, H. 1872

The Microscope in Pharmacy, Scilla.

Pharm. Jour. 32, p.281.

Describes the cellular structure of the dried bulb of *Urginea Scilla* and especially as observed in the powder.

Fluckiger, F.A. and Hanburg, D. 1874

Bulbus Scillae

Pharmacographia, 1 ed., p.627, Ibid., 2 ed., p.690; Deschamps
Drogues, v.2, p.520. (Amer. Jour. Pharm., 48, p.445)

Gives a list of synonyms, botanical origin, history, description, microscopic structure, chemical composition, commerce, use and substitutes for squill.

Husemann, T. 1875

Ein Beitrag zur Wirkung der Meerzweibel.

Deutsche Medicin. Woch, 1, p.110 (Drugg. Circ., 21, p.86).

Discusses the physiological properties of the bulb of *Scilla maritima*.

Chipman, E.D. 1876

On Squill

Proc. A.Ph.A., 24, p.526. (Drugg. Circ. 21, p.97; Amer. Jour. Pharm., 48, p.444).

Reports the existence of 2 active principles in the bulb of *Scilla maritima*.

(Correspondent) 1876

Minutes of the Pharmaceutical Meeting.
To Powder Squills.

Drugg. Circ., 20, p.175.

Reports an exhibit of samples of powdered squill. Gives a method for powdering squill in wet weather.

Husemann, T.

1876

Ueber einige Herzgiste.

Arch. f. exp. Pathol. u. Pharmakol., 5, p.228. (Klinische Wochenschrift, 3, p.1072; Therap. d. Gergenwort, 20, p.19).

The above plant is listed as a vegetable drug which grows. Reports on the use of an extract of squill as a cardiac stimulant, and compares the results of experiments with several other cardiac stimulants.

(Correspondent)

1879

Janssen, A.

1876

To Powder Squill Root.

Om Scilla Maritima.

Drugg. Circ., 23, p.205.

Arch. for Pharm., 33, p.484. (Am. Jour. Pharm., 49, p.168).

Gives a method for powdering squill.

Gives directions for the preservation of squill, and lists the active principles.

(Editor)

1879

Landerer, X.

1876

On Some Medicinal Plants of Greece.

Am. Jour. Pharm., 48, p.193. principles of squill.

Squill is reported to have been used by Pythagoras. Gives the derivation of the name scilla.

(Editor)

1879

McIntyre, W.

1876

Formulaf mit seillae et digit

Pharm., Jour., 35, p.977.

Minutes of the Pharmaceutical Meeting.

Gives 3 unofficial formulas for Pil. Scillae et official formula.

Reports an exhibit of samples of powdered squill by J.C. Biddle.

(Editor)

1879

Squilla

Chem. and Drugg., 21, p.154.

Attempts to discuss the medicinal properties of squill in rhyme.

Watson, R.

1877

Scilla Maritima (Ghousal).

Pharm. Jour., 37, p.342. (Proc. A.Ph.A., 28, p.109;
New Remedies, 8, p.245.)

The above plant is listed as a vegetable drug which grows abundantly on the island of Malta. The bulbs are exported. Scillin, scillitoxin, and scillipierin.

(Correspondent)

1879

To Powder Squill Root.

Drugg. Circ., 23, p.205. (Pharm. Jour., 40, p.352;
Amer. Jour. Pharm., 51, p.415; Yrbk. Brit. Pharm., 1879, p.211.)

Gives a method for powdering squill.

Gives an account of the active principles of squill. Discusses the uses and activity of Scillipierin, Scillitoxin, and Scillin.

(Editor)

1879

Squills

Wallazewski, S.
Drugg. Circ., 23, p.35.

1879

Constituents of Squill.
Discusses the active principles of squill.

Thesis. - Drugg. Circ., 37, p.224.

The original was not available.

(Editor)

1879

Formulae mit seillae et digit

Bentley, R. and Trimen, H.

Pharm., Jour., 38, p.977.

1880

Urginea Scilla.
Gives 3 unofficial formulas for Pil. Scillae et Digitalis as there is no official formula. 18 ed., v.2, p.1734.

Give a description, habitat, part used, general medicinal properties, uses and a full colored plate of the specimen in the British Museum.

(Editor)

1879

Squills

Chem. and Drugg., 21, p.154.

Attempts to discuss the medicinal properties of squill in rhyme.

Merck, E. and Remont, A. 1879

(*Bulbus Scillae.*)

Pharm. Zeit., 24, p.286. (Proc. A.Ph.A., 28, p.109;
New Remedies, 8, p.245.)

Reports the isolation of 3 active principles of squill;
viz., Scillin, scillitoxin, and scillipierin.

Merck, E. F.A. 1879

Preparations from Squill.

Pharm. Jour., 38, p.1038. (Pharm. Jour., 40, p.352;
Amer. Jour. Pharm., 51, p.415; Yrbk. Brit. Pharm., 1879, p.211.)

Gives an account of the active principles of squill.
Discusses the uses and activity of Scillipierin, Scillitoxin,
and Scillin.

Wells, P. 1883

Waliszewski, S. of Squills. 1879

Pharm. Jour. Constituents of Squill.

Thesis. - Drugg. Circ., 37, p.224. of squill from which
the sugar will not crystallize out.

The original was not available.

(Correspondent) 1884

Bentley, R. and Trimen, H. 1880

(Squill Bulbs.)
Urginea Scilla.

Pharm. Zittg., Chem. and Drugg., 26, p.240.

Med. Plants, p.281. (King's Am. Dispens., 18 ed., v.2,
p.1734. method is given for making a rat poison from squills.
(is probably the red variety.)

Give a description, habitat, part used, general
character, Medicinal properties, uses and a full page colored
plate of the specimen in the British Museum.

Riche, A., and Remont, A.

1880

Etudes sur la scille maritima.

Journ. o. Pharm. et o. chim., 111, p.291. (Pharm. Jour. 40, p.352. Amer. Jour. Pharm., 52, p.550.

Gives a report on the active principles of squill which Discusses the active principle of squill, scilline, which is the bitter principle.

Fluckiger, F.A.

1881

Bulbus Scillae

Pharmakognosie des Pflanzenreiches, 2 ed., p.583; Ibid., 3 ed., p.623. (Am. Jour. Pharm., 48, p.445.).

Gives a report on a case of fatal poisoning which results. Gives a list of synonyms, botanical origin, history, description and uses of squill.

Wells, P.

1883

Syrup of Squills.

Pharm. Jour., 43, p.20.

Suggests a new formula for syrup of squill from which the sugar will not crystallize out.

(Editor)
(Correspondent)

1886

1884

Total Poisoning Ascribed to Squill.
(Squill Bulbs.)

Drugg. Circ., 30, p.101. Pharm. Jour., 52, p.550. Pharm. Zittg., Chem. and Drugg., 26, p.240.

Reported the poisoning of 2 children by squill. A method is given for making a rat poison from squills. (Is probably the red variety.)

Kaisch, J.M.

1885

Minutes of the Pharmaceutical Meeting.

Am. Jour. Pharm., 58, p.50. (Pharm. Jour., 58, p.50.)

Reports an exhibit of a growing specimen of Urginea Scilla.

(Editor) J.M. 1886

Poisoning by Squill. *Pharmaceutical Meeting*

Pharm. Jour. 46, p.227.

Gives a report on the active principles of squill which probably caused the poisoning resulting from taking syrup of squill for whooping cough.

Pickard, W. 1886

(Editor) Poisoning by Squill. 1886

Pharm. Jour. Supposed Poisoning by Squill.

Pharm. Jour. 45, p.828. editor states that the poisonous

syrup of squill was probably prepared from the vinegar which Gives a report on a case of fatal poisoning which resulted from taking a mixture containing syrup of squill.

(Editor) 1886

Poisoning by Squills. Squill as a poison.

Lancet, 1886, v. 2, p. 390; and p.437. (Amer. Jour. Pharm., Drugg. Circ., 30, p.97

Reports on a case of poisoning by squill.

(Editor) 1886

Total Poisoning Ascribed to Squill.

Drugg. Circ., 30, p.101. (Proc. A.Ph.A. 35, p.107).

Reported the poisoning of 2 children by squill.

Maisch, J.M. 1886

Minutes of the Pharmaceutical Meeting.

Am. Jour. Pharm., 58, p.50. (Pharm. Jour. 53, p.82;

Proc. A.Ph.A., 42, p.907. Reports an exhibit of a growing specimen of *Urginea Scilla*. States that the bulb *Scilla maritima* contains 3 distinct principles; viz., Scillinin, scillipearin, scillamarin and a fourth, difficult to isolate.

Maisch, J.M.

1886

Minutes of the Pharmaceutical Meeting

Am. Jour. Pharm., 58, p.574.

Discusses concerning the rapid growth of the squill.

Pickard, W.

1886

Poisoning by Squill.

Pharm. Jour. 46, p.284.

In a letter to the editor states that the poisonous syrup of squill was probably prepared from the vinegar which was over standard strength.

Truman, E.B.

1886

Poisoning by Squills.

Lancet, 1886, v. 2, p. 390; and p.437. (Amer. Jour. Pharm., 59, p.15).

Reports several fatal cases of poisoning by squill.

Steinmann, G.

1887

Powdered Squill

Am. Jour. Pharm., 59, p.279. (Proc. A.Ph.A. 35, p.107).

Reports on the result of an examination of 7 samples of commercial powdered squill.

Wanizewski, S.

1893

(Constituents of Squill).

S. Union. pharm., 34, p.251. (Pharm. Jour. 53, p.82; Proc. A.Ph.A., 42, p.907.

States that the bulb *Scilla maritima* contains 4 distinct bitter principles; viz., Scillinin, scillipeerin, scillamarin and a fourth, difficult to isolate.)

(Editor)

1894

Indian Squill.

Chem. and Drugg., 45, p.884.

Gives a description of Indian Squill, the bulb of *Urginea maritima* and its use.

Moerk, F.X.

1894

Recent Contributions to the Knowledge of Squill.

Am. Jour. Pharm., 66, p.245. (Proc. A.Ph.A. 42, p.907).

Gives a summary of the recent literature of various experiments to determine the active constituents of squill.

Riviere, G. and Boilhache, M.

1895

Essais relatifs a fabrication directe de l'alcohol ethylique pur, par la fermentation de l'Asphodele rameux et da Scille maritime.

Cerapt. Rendus, 121, p.659. (Drugg. Circ., 40, p.17).

Reports on the possibility of obtaining alcohol from Asphodel and squill.

Coraby

1896

Dohme, A.R.L. (Formulae for Administration of Squill)

1897

The Histology and Pharmacognosy of Nux Vomica, Squill, Oloes, and Rhubarb.

Drugg. Circ., 41, p.126.

Discusses the histology and pharmacognosy of squill with illustrations.

(Editor) Pharmacopœia Comm.

1897

Urginea Scilla. (an Squill).

Chem. Drugg. 51, p.658. Indian and Colonial Addendum 1900.
(Pharm. Jour. 65, p.665.)

Gives a description of the flowering squill plant (Urginea Scilla) as seen in the Royal Gardens at Kew. title, the definition with scientific names, directions for storage, use of Indian Squill and its active constituents.

Jeliffe, S.E.

1897

Cæsar and Microscopical Characteristics of Powdered 1900
Colibicum, Aconite, Squill and Jolop. Drugg. Circ., 41,
p.350. Bulbus Scillæ.

Pharm Describes the microscopical structure of powdered squill and gives drawings to illustrate.

Give a method for preparing a rat poison from whole fresh squill bulbs.

(British Pharmacopœia Committee)

1898

(Editor) Crinum

1900

Chem. and Drugg. 53, p.907. Poison.

Pharm A proposal from India to substitute the bulb of Crinum asiaticum for squill in the British Pharmacopœia.

Give a method of preparing a mouse poison from wheat and an infusion of fresh squill bulbs.

Coraby

1898

Felter, W. (Formulae for Administration of Squill)

1900

La Med. Mod., 11 (Pharm. Era, 20, p.147).

Squill Several formulas for the administration of squill are given.

Gives the official definition, common name, botanical source, history and description, chemical composition, action, medical uses, and dosage, specific indications and uses, and related species of squill.

British Pharmacopoesia Comm.

1900

(Urginea or Indian Squill).

The Brit. Pharm. 1898, Indian and Colonial Addendum 1900.
(Pharm. Jour. 65, p.665.)

Give a description of squill bulb its properties,
habit Gives the official Latinized title and English title,
the definition with scientific names, directions for storage,
use of Indian Squill and its active constituents.

(Editor)

Caesar and Loretz.

1900

Bulbus Scillae.

Pharm. Central. 41, p.635. (Proc. A.Ph.A., 49, p.660).

Give a method for preparing a rat poison from whole
fresh squill bulbs.

(Editor)

1900

Squill as a Mouse Poison.

Pharm. Jour. 64, p.290.

Reports on the yield of extract of squill obtained by
the u Gives a method of preparing a mouse poison from wheat
and an infusion of fresh squill bulbs.

(Editor)

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

1906
1900

Scilla (U.S.P.)

Squill, King's Amer. Dispens. 18 ed., v. 2, p. 1734.

Comments on a formula for the fluid extract of squill.
Gives the official definition, common name, botanical
source, history and description, chemical composition, action,
medical uses, and dosage, specific indications and uses,
and related species of squill.

Galenic Preparations of Squill.

Pharm. Jour. 79, p.99.

Gives suggested formulas for various preparations of
squill contained in the British Pharmaceutical Codex.

Berg, O.C. and Schmidt, C.F. 1902

Urginia Maritima.

Atlas der Officinellin Pflanzen, 2 ed., v.4, p.43.

Give a description of squill bulb its properties, habitat, also describes the capsules and flowers, and mention its use in medicine.

Dieterich, E. von. 1909

(Editor) Ein-Beitrag zur Verfoelachung von Bulbus Sc 1903.

Pharm. Ze. Squill Poisoning 71. (Am. Jour. Pharm., 82, p.130).

Chem. Drugg. 62, p.728 and 775.1, finding large amounts of stones present.

Gives the results of a trial of suspected poisoning by squill.

Martin, W. 1909

(Editor) Bio Chemical Testing. 1905

Chem. and Bulbus Scillae. 213.

Pharm. Ztg., 50, p.836. (Proc. A.Ph.A., 54, p.728. tests made upon Digitalis, Squill, and Strophanthus.

Reports on the yield of extract of squill obtained by the use of different solvents.

Sharp, G. 1910

(Editor) Squill Studied Historically. 1906

Pharm. Jour. Fluid Extract of Squill.

Bull. Pharm., 20, p.522. (Proc. A.Ph.A., 55, p.658) giving the active agents found. Also discusses the pharmacology and Comments on a formula for the fluid extract of squill.

Greenish, H.G. 1907

Galenical Preparations of Squill.

Pharm. Jour. 79, p.99.

Gives suggested formulas for various preparations of squill contained in the British Pharmaceutical Codex. Gives botanical notes of the genus Scilla, and enumerates several species.

(Editor) Pharmacopoeia Committee)

1908

Parched Squill.

Drugg. Circ., 52, p.276.

Gives a description of parched squill. or inclusion in the forthcoming edition of the British Pharmacopoeia.

Dieterich, K. von

1909

(Editor)

Ein Beitrag zur Verfolschung von Bulbus Scillae.

Bulbus Scillae

Pharm. Zentralbl., 50, p.971. (Am. Jour. Pharm., 82, p.130).

Chem. Drugg., 78, p.444.

Lists adulterants of squill, finding large amounts of stones present. the total ash content of squill.

Martin, W. C.

1909

Bio Chemical Testing.

Chem. and Drugg., 75, p.213. Am. Jour., 88, p.537; Yrbk.

A.Ph.A., 1, p.37.)

Gives the methods and results of Bio Chemical tests made upon Digitalis, Squill, and Strophanthus. of the extract of squill.

Sharp, G.

1910

(Editor)

Squill Studied Historically.

Bulbus Scillae.

Pharm. Jour., 84, p.170.

Pharm. Zeit., 57, p.845. (Yrbk. A.Ph.A., 1, p.81).

A condensed article on the chemistry of squill giving the active agents found. Also discusses the pharmacology and the therapeutics of squill.

Hamilton, H.C.

1912

Sharp, G.

1910

The Heart Tonic Unit.

Squill Studied Historically.

Am. Jour. Pharm., 84, p.99.

Pharm. Jour., 84, p.136.

Lists the various names, origin of names; comments on the ancient as well as the modern use of squill in medicine. Gives botanical notes of the genus Scilla, and enumerates several species.

(British Pharmacopoeia Committee)

1911

Scilla. Standards for some biologically standardized drugs.

Chem. Drugg., 79, p.357.

Jour. A.Ph.A., 2, p.146.

Gives a monograph on squill proposed for inclusion in the forthcoming edition of the British Pharmacopoeia.

(Editor) H.

1911

Bulbus Scillae

Chem. Drugg. 78, p.444. (Drugg. Circ., 57, p.741).

Gives data on the total ash content of squill. discusses the appearance of squill and its color.

Glücksmann, C.

1912

Kopaczewski, W.

1914

(Extractum Scillae)

Recherches sur la composition de la scille.

Pharm. Praxis, 1, p.9. (Pharm. Jour., 88, p.537; Yrbok. A.Ph.A., 1, p.37.) p.1530. (Pharm. Jour., 92, p.879;

Yrbk. A.Ph.A., 3, p.582; Drugg. Circ., 58, p.618; Am. Jour. Pharm. Gives qualitative tests for the identification of the extract of squill.

Discusses scillitin, which he says is the active principle of squill.

(Editor)

1912

(Murray, J) Bulbus Scillae.

1914

Pharm. Zeit., 57, p.845. (Yrbk. A.Ph.A., 1, p.81).

Murray A formula is given for a rat paste containing squill. 86, p.507.)

Gives the meaning and entomology of squill with references arranged.

Hamilton, H.C.

1912

The Heart Tonic Unit.

Am. Jour. Pharm., 84, p.99.

1914

The strength of extract of squill is expressed in Heart Tonic Units. or H.T.U. 1 ed., v.2, p.1572.

Gives synonyms, entomology, classification, description, pathology, morphology, anatomy, chemistry, and history of *Urginea laritima* with numerous references.

Haskell, C.C. and Eckler, C.R.

1913

Tentative Standards for some biologically standardized drugs.

Jour. A.Ph.A., 2, p.146.

Reports the results of the biological assay of squill.

Rusby, H.H.

1913

Squills.

Jour. A.Ph.A., 2, p.1106. (Drugg. Circ., 57, p.741).

In a report of the committee on Drug Markets, discusses the appearance of squill and its color.

Kopaczewski, W.

1914

Recherches sur la composition de la scille.

Compt. Rendes, 158, p.1520. (Pharm. Jour., 92, p.879; Yrbk. A.Ph.A., 3, p.582; Drugg. Circ., 58, p.618; Am. Jour. Pharm., 86, p.433; Yrbk. Brit. Pharm., 1914, p.100.)

Discusses scillitin, which he says is the active principle of squill.

(Murray, J.A.H.

1914

Squill.

Murray's English Dictionary, 9, p.743. (Chem. and Drugg., 86, p.507.)

Gives the meaning and entomology of squill with references chronologically arranged.

Gives an unusually detailed study of the constituents of squill, isolated from the fresh bulb.

Tschirch, A.

1917

Bulbus Scillae

Handbuch der Pharmakognosie, 1 ed., v.2, p.1579.

Gives synonyms, entomology, classification, description, pathology, morphology, anatomy, chemistry, and history of *Urginea Maritima* with numerous references.

Farwell, O.A.

1918

Scilla. and Squill as Rat Poisons.

Drug. Circ., 62, p.536.

Suggests changing the name of *Urginea Maritima* to *Scilla maritima*.

Greenish, H.C.

1920

Grantham, R.A. and Colson, H.C.

1918

The Collection and Preparation of Squill.
Fluid extract of Squill.

Pharm. Jour. 105, p.284. (Yrbk. A.Ph.A., 9, p.334).

J. Am. Ph.A., 7, p.940. (Yrbk. A.Ph.A., 7, p.96).

Gives methods of preparation of the fluid extract of squill and methods of assay. squill, with illustrations.

Mendel, F., Bolboni, G.M., and Viko, L.E.

1918

Bulbus Scillae, ein zu Anrecht vernachlassigtes
Herzmittel.

Jour. Amer. Med. Assoc., 75, p.971 (Yrbk. Brit. Pharm.,

Therap. d. Gegenwart., 20, p.16, p.50, 92 and 126.

(Klinische Wochenschrift, 3, p.1072); Arch. f exp. Pathol.
und Pharmacol. 95, p.258.)

Experiments on the action of squill
in treating certain types of heart disease.

Reports on the use of squill in the treatment of certain
types of heart ailments.

(Editor)

1922

Buschmann, E. Official Squill. (*Urginea Scilla*).

1919

Chem. and Untersuchgen über die chemischen Bestandteile
von Bulbus Scillae.

The bulb of *Scilla autumnalis* is suggested as a
Archind. Pharm. 257, p.79. Chem. and Drugg. 93, p.1630.

Yrbk. A.Ph.A., 9, p.334; Drugg. Circ., 65, p.102, Yrbk. Brit.
Pharm. 1920, p.175.

Gives an unusually detailed study of the constituents
of squill, isolated from the fresh bulb.

(Editor) le, and Cristol, P. 1920

Barium and Squill as Rat Poisons.

Pharm. Jour. 104, p.391. 89, p.29. (Pharm. Jour. 108, p.455.)

Barium carbonate is used with squill as a rat poison.
same principles as that of Urginea Scilla.

Greenish, H.G. 1920

Marckwalder, J. 1922

The Collection and Preparation of Squill.

Pharm. Jour. 105, p.284. (Yrbk. A.Ph.A., 9, p.334).

Drugg. Circ., 64, p.424. 1, p.812. (Yrbk. A.Ph.A., 11, p.257; Klinische Wochenschrift, 3, p.1075.)

Gives an account of the methods of collection and preparation of red and white squill, with illustrations.
glucosides of squill.

White, P.D., Bolboni, G.M., and Viko, L.E. 1920

(Editor) 1923

The Digitalis-like Action of Squill.

Rat Poisoning.

Jour. Amer. Med. Assoc., 75, p.971 (Yrbk. Brit. Pharm., 57, p.199.) Drugg. 98, p.212.

Give the results of experiments on the action of squill in treating certain types of heart disease.

Okushima, K. 1923

(Editor) 1922

Über die Pharmakologische Stellung des
The Official Squill. (Urginea Scilla). affen.

Chem. and Drugg., 97, p.392. Pharmakol. 98, p.258. (Klinische Wochenschrift, 3, p.1072.)

The bulb of Scilla autumnolia is suggested as a substitute for the bulb of Urginea Scilla. determine the activity of the glycosides of squill, using 3 curves.

Galavielle, and Cristol, P. 1922

Scilla Autumnolis.

Bull. de. Scie. Pharm., 29, p.29. (Pharm. Jour. 108, p.455.)

The bulb of *Scilla Autumnalis* is found to contain the same principles as that of *Urginea Scilla*.

extracting the cardiac glucoside of squill (No.217, 247). This patent lists four methods of preparation.

Marckwalder, J. 1922

Chemische Wirkungsweise von *Bulbus Scillae*. 1924

Klinische Wochenschrift, 1, p.212. (Yrbk. A.Ph.A., 11, p.237; Klinische Wochenschrift, 3, p.1075.)

Discusses a method for obtaining quantitatively the glucosides of squill.

An English patent was granted for the process of obtaining and using 4 methods of extracts on the cardiac glucoside

(Editor) l. (No.199, 400). 1923

Rat Poisoning.

Chem. and Drugg. 98, p.212. 1924

Gives a formula for a rat poison containing squill.

"Klinische Wochenschrift", 3, p.1072. (Chem. and Drugg. 10, p.899.)

Okushima, K. 1923

Discusses the therapeutic properties of squill, giving the result: *Über die Pharmakologische Stellung des Scillipektrin, and scillaglykoids center den Digitaliестaffeln.*

Arch. f. exp. Pathol. u. Pharmakol. 95, p.258. (Klinische Wochenschrift, 3, p.1072.)

(Editor) 1923

Gives the results of experiments to determine the activity of the glycosides of squill, using 3 curves.

Chem. and Drugg., 103, p.454.

Squill, bulb, both red and white, are used as a rat and mice poison.

Chemische Fabrik vormals Sandoz 1924

Process for the Manufacture of the Cardiac
Glucoside of Bulbus Scillae.

Jour. Sci. British Patents, vol. 1173, no. 217, 247. (Chem.
14, p.113; and Drugg. 101, p.53. 1935, p.320.)

An English patent was granted for the process for
extracting the cardiac glucoside of squill (No. 217, 247).
This patent lists four methods of preparation.

(Editor) 1924
Chemische Fabrik vormals Sandoz 1924

Doctoring Slack trees with Squill.

Process for the Manufacture of the Cardiac
Glucoside of Bulbus Scillae.

British Patents, vol. 994, no. 199, 400 (Chem. and Drugg.
101, p.53.)

An English patent was granted for the process of obtaining
and using 4 methods of extracts on the cardiac glucoside
of squill. (No. 199, 400).

Recherches sur la composition de la scilla.

Korner, E. (Aus. 163, p.376. (Yrbk. A.Ph.A., 13, p.2) 1924

Disc. Klinische Erfahrungen Mit Scillaren. its action
on the heart.

"Klinische Wochenschrift", 3, p.1072. (Chem. and Drugg.
10, p.899.).

Hoff Discusses the therapeutic properties of squill, giving
the results of several tests with scillitoxin, scillipekrin,
and scillaren. see for the Manufacture of the Pure Glucoside
of Bulbus Scillae.

Brit. Patents, vol. 1557, no. 235, 689 (Chem. and Drugg.
(Editor) 90.) 1925

An English Squill is poisonous. granted on the process for the
manufacture of the glucoside of squill; No. 235, p.689.
Chem. and Drugg., 103, p.454.

Squill, bulb, both red and white, are used as a rat
and mice poison.

George, E.

1925

Squill.

Jour. South African Chem. Inst., 8, p.14. (Yrbk. A. Ph.A., 14, p.112; Yrbk. Brit. Pharm., 1925, p.220.)

Gives a comparison of the properties of European squill and the African from Urginea Burkei.

(Editor) F.H.

1926

Doctoring Sick trees with Squill. red and white Squills.

Pharm. Jour., 117, p.22.

Jour. Pharmacol. and Exp. Therapeut., 31, p.137.

The natives of Majorca use the bulb Scilla Maritima to doctor sick trees. on of the actions of red and white squill preparations on rats and frogs.

Henrijean, F. and Kopaczewski, W.

1926

Wood, H.C. and LaWall, C.H.

Recheredes sur la composition de la scilla.

Compt. Rendus. 183, p.376. (Yrbk. A.Ph.A., 15, p.207).

Dispens. U.S.A., 21 ed., p.965; ibid., 22 ed., p.963.

Discusses the composition of squill and its action on the heart. official definition, official and non-official synonyma, description and physical properties, assay, constituents, uses and official preparations of squill.

Hoffman, La Roche and Co.

1926

Burn, J.H. Process for the Manufacture of the Pure Glucoside of Bulbus Scillae.

The Standard for the Biological Assay of Squill.

Brit. Patents, vol. 1557, no.255, 689 (Chem. and Drugg. 105, p.390.) 118, p.328. (Yrbk. A.Ph.A., 16, p.275; Bull.

G. Sci. Pharmacol., 40, p.139; Ibid., 44, p.274. Jour. A.

Ph.A. An English patent was granted on the process for the manufacture of the glucoside of squill; No.255, p.689, using 2 methods of procedure. of assay of squill and compares the results obtained.

Tio, G. L. 1926

Squill. and Glucoside

Arch. d. Farmacol. Sper., 42, p.234. (Yrbk. A.Ph.A., A.Ph.A. 15, p.172.)

A comparison of the African squill with that from Genoa, Italy. are discussed.

Winton, F.H. 1926

A contract between the actions of red and white Squills. in *Bulbus Scillae* erreichbar und menschenwert?

Jour. Pharmacol. and Exp. Therapeut., 31, p.137.

Arch. d. Pharm., 265, p.91. (Yrbk. A.Ph.A., 16, p.274;

Bull. Gives a comparison of the actions of red and white squill preparations on rats and frogs.

Gives the results of comparative tests of the strength of commercial squill and squill prepared in laboratories the latter under controlled conditions.

Wood, H.C. and LaWall, C.H. 1926

Scilla, U.S., Br. Squill.

Tio, G. 1927
Dispens. U.S.A., 21 ed., p.965; *ibid.*, 22 ed., p.963.

Gives the official definition, official and non-official synonyms, description and physical properties, assay, constituents, uses and official preparations of squill.

Discusses the potency of African squill.

Burn, J.H. 1927

Sheer, H. and Sigerist, E. 1927

The Standard for the Biological Assay of Squill.

Zur Geschichte der Scilla-Verwendung.

Pharm. Jour. 118, p.328. (Yrbk. A.Ph.A., 16, p.275; Bull. d. Sci. Pharmacol., 40, p.130; *Ibid.*, 44, p.274. m Jour. A. Ph.A., 23, p.1185, Yrbk. Brit. Pharm. 1929, p.278.

Outlines various methods of assay of squill and compares the results obtained.

Stoel, A. 1927

Zur Kenntnis von Scillaren.

Pharm. Zentbl. 66, p.719. (Yrbk. A.Ph.A., 16, p.274.)

Discusses several plant principles isolated from squill.

David, L. Erik vormals Sandoz.

1927

Alkaloid and Glucoside the Cardio-active Substance of Bulbus Scillae. British Patents, vol. 1872, no. 287.

Reaction of Squill. Drug. Circ., 71, p.902. (Yrbk. A.Ph.A. 16, p.274.)

(Chem. and Drugg. 109, p.595.)

Reactions of preparations of squill for alkaloids and germicides are discussed. 147, employing 4 methods of extraction, was granted for a process for extracting the cardio-active substance of bulb squill.

Focke, C.

1927

Stoll, A. Ist ein stärkerer, gleichmässiger Wirkungswert das offizinellin Bulbus Scillae erreichbar und munschrenwert? over Zeeajuin.

Arch. d. Pharm., 265, p.91. (Yrbk. A.Ph.A., 16, p.274; Bull. d. Sci. Pharmacol., 40, p.131.)

Gives the results of comparative tests of the strength of commercial squill and squill prepared in laboratories the latter under controlled conditions.

Schwartz, E.W., Hann, R.M. and Keenan, G.L.

1929

Tio, G. Ouabain, Physiological Standard for Digitalis, Strophanthus, and Squill, Jour. Pharmacol. and Squill. Therapeutics, 36, p.481.

Arch. farmacol. sper. (Yrbk. A.Ph.A., 16, p.274.)

Discusses the potency of African squill, italica, strophanthus, and squill, and the substances used in the assay.

Sheer, H. and Sigerist, E.

1927

Cohen, R. Zur Geschichte der Scilla-Verwendung.

1930

Schweiz. Med. Wochenschrift, 8, p.1168. (Pharm. Weekbl., 65, 1275.) Dosage et Etalonnage biologique de quelques glucosides cardiotoniques.

Give historical data on squill and its uses.

(Bull. of Sci. Pharm., 44, p.274.) These Doct. Univ. (Pharm.) Paris.

Stoel, A. original was not available.

1927

Zur Kenntnis von Scillaren.

Pharm. Zenthl. 68, p.719. (Yrbk. A.Ph.A., 16, p.274.)

Discusses several plant principles isolated from squill.

Chem. Fabrik vormals Sandoz.

1928

Process for Extracting the Cardio-active Substance of *Bulbus Scillae*. British Patents, vol.1872, no.287, p.147., p.301.

(Chem. and Drugg. 109, p.593.) of squill and states that it has served humanity for more than 2,600 years.

An English patent No.287, 147, employing 4 methods of extraction, was granted for a process for extracting the cardio-active substance of bulb squill.

Rosenthaler, T. von and Kohli, R.

1930

Chemische Charakterisierung von Drogen

Stoll, A. Sinistria und Schleim in *Bulbus Scillae*. 1928

Apotheker Onderzoekingen over Zeeajuin. Ph.A., 19, p.195; Ibid., 20, p.77; Pharm. Zentralbl. 72, p.72.

Pharm. Weekbl. 65, p.1275. (Yrbk. A.Ph.A., 16, p.733; Drugg. Circ., 73, p.198.)

for the isolation of sinistria and the mullage found in squill.

Discusses the active constituents of squill.

Chopra, R.W., De P., and Mukherjee, B.

1931

Schwartz, E.W., Hann, R.M. and Keenan, G.L.

1929

Indian Squill

Ouabain, Physiological Standard for Digitalis, Strophanthus, and Squill, Jour. Pharmacol. and Yrbk. A.Ph. Exp. Therapeutics, 36, p.481.

(Bull. Sci. Pharm. 44, p.276.) India are cited as possible competitors of *Urginea maritima* on the European markets, because Discusses the physiological assay of digitalis, strophanthus, and squill, and the substances used in the assay.

(Editor)

1931

Cohen, R. Sicilian Squill.

1930

Chem. and Drugg., 114, p.3.

(Dosage et Etalonnage biologique de quelques Tell. glucosides cardiotoniques.) Sicily.

(Bull. of Sci. Pharm., 44, p.274.) These Doct. Univ. (Pharm.) Paris.

The original was not available.

McIlvaine Bros., Inc.

1930

Squill Root.

Drug Markets, 26, p.301. (Yrbk. A.Ph.A., 20, p.248.)

Discusses the modern use of squill and states that it has served humanity for more than 2,600 years.

Rosenthaler, T. von and Kohli, R.

1930

Chemische Charakterisierung von Drogen Sinistria und Schleim in Bulbus Scillae. (Yrbk. A.Ph.A., 19, p.195; Ibid., 20, p.77; Pharm. Zentralbl. 72, p.72. Ibid., 44, p.275.)

Describe a procedure for the isolation of sinistrin and the mucilage found in squill.

the cardiac glucosides, cvaboise, digitoline, scillarine and cymarine.

Chopra, R.W., De P., and Mukherjee, B.

1931

Stasiak, A.

1932

Indian Squill

Über biologischen Eichungswert mittels verschiedener Indian Medical Gazette 12, p.666. (Pharm. Jour. 128, p.394). Yrbk. A.Ph.A., 20, pp.310 and 318.

Arch. Scilla iodica and Urginea indica are cited as possible competitors of Urginea maritima on the European markets, because they are in no way inferior.

Discusses various methods of standardizing tinctures of squill and strophanthus biologically.

(Editor)

1931

Danzel, L. Sicilian Squill.

1933

Chem. and Drugg., 114, p.3. (Poison)

La Po. Tells of the squill industry in Sicily. (Pharm. Jour. 131, p.87.)

Gives a method for preparing a rat poison from squill bulbs either red or white.

(Editor) Levy, J., and Cohen, R.

1931

Vinegar of Squill. *Sur le dosage biologique des poudres de scille.*

Agr. Farm Tidende. (Yrbk. A.Ph.A., 20, p.248.) *Ibid.*, 22, p.131;

Bull. Sci. Pharm., 42, p.221; *Ibid.*, 44, p.276.

Gives a method for the determination of the alkaloidal content of vinegar of squill. powdered squill.

Tevy, J., and Cohen, R.

1931

Dosage biologique et etalonnage de quelques glucoside conditoniques: ociabaine, digitaline, scillarines, cymarine. *A.A.*, 25, p.1180. (*Bull. Sci. Pharmacol.*, 44, p.275.)

Bull. Sci. Pharm., 38, p.23. *Ibid.*, 40, p.130; *Ibid.*, 44, p.275. discusses the methods of bioassaying squill.

Discusses the assay of the cardiac glucosides, ovaboise, digitoline, scillarine and cymarine.

Wakes, F. and Willimatt, S.G.

1934

Stasiak, A.

The Cardiac Activity and Toxicity towards Rats of White Squill from Cyprus.

1932

Chem. and Uber biologischen Eichungswert mettels verschiedener Verfahren bergesteller Scilla und Strophanthustinkturen. results of experiments with red and white squill on rats as to relative toxicity of each. Gives

Archiv. Pharm., 270, p.385, (*Yrbk. A.Ph.A.*, 21, p.369; *Ibid.*, 22, p.131; *Bull. Sci. Pharm.*, 44, p.276.

Discusses various methods of standardizing tinctures of squill and strophanthus biologically.

1933

Sur le dosage biologique des poudres de scille.

Danzel, L.A.

Pharmacol., 42, p.65. (*Pharm. Abst.*, 1, 1933; *Bull. Sci. Pharmacol.*, 44, p.276.)

(Squill as a Rat Poison)

La Parfumerie Moderne, 27, p.221. (*Pharm. Jour.* 131, p.87.)

Gives a method for preparing a rat poison from squill bulbs either red or white.

Mascre, M., Levy, J., and Cohen, R.

1933

Sur le dosage biologique des poudres de scille.

Bull. d. Sci. Pharm., 40, p.129. (Yrbk. A.Ph.A., 22, p.131;
Bull. Sci. Pharm. 42, p.66; Ibid., 44, p.276.

Discusses the bioassay of powdered squill.

Discusses the practicability of using rabbits in the assay of digitalis, strophanthus and squill.

Rosen, H.

1934

Bijlans, The Bioassay of Squill.

1936

Jour. A.Ph.A., 23, p.1180. (Bull. Sci. Pharmacol., 44, p.276.)

Acta Brevia Neerl., p.94. (Pharm. Abst., 3, 166.)

Discusses the methods of bioassaying squill.

Discusses the separation and toxic effects of the glucoside $C_{15}H_{20}O_8$ isolated from squill.

Wakes, F. and Willimatt, S.G.

1934

Cohen, R. The Cardiac Activity and Toxicity towards Rats of Red and White Squill from Cyprus.

Chem. and Drug., 121, p.117.

Jour. Pharm. et d. Chim. 8 ed., v.23, p.573. (Bull. Sci. Pharm., 44, p.276.)

Reports the results of experiments with red and white squill on rats as to relative toxicity of each. Gives tables showing data.

Mascre, M., Levy, J., and Cohen, R.

1935

Sur le dosage biologique des poudres de scille.

Bull. Sci. Pharmacol., 42, p.66. (Pharm. Abst., 1, p.87;
Bull. Sci. Pharmacol., 44, p.276.)

Report on the study of methods of preparation, preservation and assay of squill powder.

Discusses the study of various alcoholic and aqueous preparations of squill.

Rapson, G.N. and Underhill, S.W.F. 1935

The Use of Rabbits in the Assay of Digitalis,
Strophanthus and Squills.

Pharm. Jour. 136, p.555. (Pharm. Abst., 3, p.349.)
Chem. and Drugg., 123, p.19. (Pharm. Jour., 134, p.797;
Pharm. Abst., 1, p.337; Bull. Sci. Pharm., 44, p.26.)
and Scillaren B, as cardiac stimulants similar in action to
digitalis. Discusses the practicability of using rabbits in the
assay of digitalis, strophanthus and squill.

Bijlsma, U.G. and Picard, F.H.J. 1936

Sur l'etalonnage biologique de la Scille.
Scilla.

Bull. Sci. Pharmacol., 44, p.257. (Pharm. Abst., 3, p.638,
Acta Brevia Neerl., p.94. (Pharm. Abst., 3, 166.)

Discusses the separation and toxic effects of the
glucoside $C_{15}H_{20}O_6$ isolated from squill. ventricles, and
pigeons as test animals.

Cohen, R., and Launay, L. 1936

Sur le dosage biologique des poudres de scille.

Jour. pharm. et d. Chim. 8 ed., v.23, p.573. (Bull. Sci.
Pharmacol. 44, p.274.)

Report experiments on methods of assaying powdered squill.

Cohen, R. and Launay, L. 1936

Sur la toxicite des diverses preparations de
scille.

Jour. pharm. et d chim., 8 ed., v.23, p.305. (Bull. Sci.
Pharmacol., 44, p.274.)

Gives a comparison of the toxicity of various alcoholic
and aqueous preparations of squill.

LIST OF BOOKS CONSULTED

1936

Stoll, A.

The Glycosides of Digitalis and Squill.

Coxe, J.R.

Pharm. Jour. 136, p.555. (Pharm. Abst., 2, p.349.)

Recommends the use of "Cardiac glucosides", Scillaren A and Scillaren B, as cardiac stimulants similar in action to digitalis.

King, J.

Cohen, R. and Launay, T. 1937

Sur l'etalonnage biologique de la Scille.

Bull. Sci. Pharmacol., 44, p.257. (Pharm. Abst., 3, p.538, 4, p.522.)

Make a detailed study of several methods of assaying squill using guinea pigs, rabbits, snail ventricals, and pigeons as test animals.

(The) Eclectic and General Dispens(atory) 1827.

Lindley, J.

Flora Med(ica) 1838.

Wood, G.B. and Bache, F.

(The) Dispens(atory of the) U(nited) S(tates) (of) A(merica), 1 ed., 1833; 2 ed., 1834; 3 ed., 1836; 4 ed., 1839; 5 ed., 1843; 6 ed., 1845; 7 ed., 1847; 8 ed., 1849; 9 ed., 1851; 10 ed., 1854; 11 ed., 1858; 12 ed., 1865; 13 ed., 1870; 14 ed., 1879; 15 ed., 1883; 16 ed., 1892; 17 ed., 1894; 18 ed., 1899; 19 ed., 1907; 20 ed., 1916; 21 ed., 1926; 22 ed., 1937.

Woodville, W.

Medical Botany, 2 ed., 1810.

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- Coxe, J.R. (The) Am(eric)an Jour(nal of) Pharm(acy) Vol. 1-110; 1825-1938.
 (The) Am(eric)an Dispens(atory), 1 ed., 1806;
 2. 4 ed., 1818; 7 ed., 1827; 8 ed., 1830; 9 ed., 1831;
 6 ed., 1825.
- King, J. Chem(ist) and Drugg(ist)
 Vol. 1-128; 1859-1938.
 (The) Am(eric)an Dispens(atory). 6 ed., 1864;
 8 ed., 1872; 10 ed., 1875; 15 ed., 1881; 16 ed., 1889;
 4. 18 ed., 1900.
 Vol. 1-82; 1857-1938.
- King, J. and Newton, R.S.
 5. Pharm(aceutical) Abst(racts)
 Eclectic Dispens(atory) 1 ed., 1852.
6. Pharm(acy) An American Physician
 Vol. 1-67; 1887-1938.
 (The) Eclectic and General Dispens(atory) 1827.
7. Pharm(aceutical) Jour(nal)
 Lindley, J. 141, 1841-1938.
 Flora Med(ica) 1838.
8. Proc(eedings of the) A(merican) P(harmaceutical)
 A(ssociation).
 Wood, G.B. and Bache, F.
 (The) Dispens(atory of the) U(nited) S(tates) (of)
 9. A(merica), 1 ed., 1833; 2 ed., 1834; 3 ed., 1836;
 4 ed., 1839; 5 ed., 1843; 6 ed., 1845; 7 ed., 1847;
 8 ed., 1849; 9 ed., 1851; 10 ed., 1854; 11 ed., 1858;
 12 ed., 1865; 13 ed., 1870; 14 ed., 1879; 15 ed., 1883;
 16 ed., 1892; 17 ed., 1894; 18 ed., 1899; 19 ed., 1907;
 10. 20 ed., 1918; 21 ed., 1926; 22 ed., 1937.
 Vol. 1-74; 1864-1938.
- Woodville, W.
 Medical Botany, 2 ed., 1810.

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1. Am(eric)an Jour(nal of) Pharm(acy) Vol. 1-110; 1825-1938.
2. (The) Chemist
Vol. 1-34; 1824-1858.
3. (The) Chem(ist) and Drugg(ist)
Vol. 1-128, 1859-1938.
4. Drugg(ist) Circ(ular)
Vol. 1-82; 1857-1938.
5. Pharm(aceutical) Abst(racts)
Vol. 1-4, 1935-1938.
6. Pharm(aceutical) Era
Vol. 1-67, 1887-1930.
7. Pharm(aceutical) Jour(nal)
Vol. 1-141, 1841-1938.
8. Proc(eedings of the) A(merican) P(harmaceutical)
A(ssociation).
Vol. 1-59, 1851-1911.
9. Y(ea)rb(oo)k (of the) A(merican) P(harmaceutical)
A(ssociation)
Vol. 1-23, 1912-1934.
10. Y(ea)rb(oo)k (of the) Brit(ish) Pharm(aceutical)
Conference)
Vol. 1-74, 1864-1938.

U.S.P. 1820. (P) p.45.

Scilla. Scilla maritima V. II, 125

Squill. Radix. The root.

THE PHARMACOPOEIA

U.S.P. 1830 (N.Y.) p.55.

OF THE

Scillae Radix. Scilla Maritima.

UNITED STATES OF AMERICA

Bulb of the Squill.

Prop. Bulb. (U.S.P.) (O-XI) (1820-1930) taste, bit-ter, inodorous; extracted by vinegar, alcohol, and water. It is most active in its recent state, and if long kept or dried at too high a temperature becomes nearly inert.

Med. Oper. purgative; in smaller, expecto-rant, diuretic. Dose as a diuretic, gr. i. to grs. vi.

THE NATIONAL FORMULARY

(N.F.) (I-VI) (1888-1935)

U.S.P. 1830 (Phil.) P. p.23.

Scilla. Scilla maritima. 125.

HISTORY OF SQUILL

Squill. Bulbus. The bulb.

U. S.P. 1840 (Phil.) p.35.

Scilla. Squill.

The bulb of Scilla maritima.

U.S.P. 1850. (P) p.40.

U.S.P. 1820. (P) p.45.

Scilla. *Scilla maritima* W. II, 125

Squill. Radix. The root.

U.S.P. 1860. (P) p.49.

U.S.P. 1830 (N.Y.) p.56.

Scillae Radix. *Scilla Maritima*.

Bulb of the Squill.

Prop. Bulb, large, pear-shaped, lamellated; inodorous; taste, bit-ter, nauseous, acrid; virtues extracted by vinegar, alcohol, and water./ It is most active in its recent state, and if long kept or dried at too high/ a temperature becomes nearly inert.

Med. Oper. In large doses, emetic, purgative; in smaller, expecto-rant, diuretic. Dose as a diuretic, gr. I. to grs. VI.

Scilla. Squill.

U.S.P. 1830 (Phil.) P. p.23.

Scilla. *Scilla maritima*. W. II. 125.

Squill. Bulbus. The bulb.

U. S.P. 1840 (Phil.) p.35.

Scilla. Squill. Preparations: Acetum Scillae. Extractum Scillae
Tinctura Scillae Com-positus. Tinctura Scillae.

The bulb of *Scilla maritima*.

U.S.P. 1890. p. 348.

Scilla. Squill.

The bulb of *Urginea Maritima* (Linne) Baker (nat. ord. Liliaceae),/deprived of its dry, membranaceous outer scales, and cut into thin/slices, the central portions being rejected.

U.S.P. 1850. (P) p.40., about 5 cm. long, slightly translucent, yellowish-white/ or reddish, brittle and Scilla. Squill. dry, tough and flexible after exposure to damp air; inodorous; taste muciliginous, bitter, and acrid. The bulb of *Scilla maritima*.

Preparations: Acetum Scillae. Extractum Scillae Fluidum. Tinctura Scillae.

U.S.P. 1860. (P) p.49.

Scilla. Squill.

U.S.P. 1900 p.390.

The bulb of *Scilla maritima*.

Scilla. Squill.

The bulb of *Urginea maritima* (Linne) Baker (Fam. U.S.P. 1870. (P) p.48. its dry, membranaceous outer scales, cut into thin slices/ and carefully dried, the central Scilla. Squill. rejected.

The bulb of *Scilla maritima*. curved, somewhat translucent, yellowish-white or reddish-white segments, 3 to 5 cm. long, brittle and pulverizable when dry, tough and flexible when damp; odor slight; taste muciliginous, bitter and acrid. U.S.P. 1880. p.290. 3 grs. = 125 milligrammes (2 grains.)

Scilla. Squill.

U.S.P. The sliced bulb of *Urginea Scilla Steinheil* (Nat. Ord., Tiliaceae).

Scilla. Squill. Scill.

In narrow segments, about two inches (5 centimeters) long, slightly translucent, yellowish-white or reddish, brittle and pulverizable when dry, flexible after exposure to damp air; inodorous; muciliginous, bitter, and acrid. Containers, in a dry place. If made into the official tincture and assayed biologically, the minimum/lethal dose should be 1/200 of the official strength. Preparations: Acetum Scillae. Extractum Scillae Fluidum. Syrupus Scillae Compositus. Tinctura Scillae. each gramme/ of body-weight of frog.

In irregular, more or less curved, somewhat flattened U.S.P. 1890. p.348. cm. in length, yellowish-white, somewhat translucent, nearly smooth and lustrous with slight Scilla. Squill. areolar bundles; brittle when dry/ and somewhat flexible when damp; odor slight; taste bitter and astringent. The bulb of *Urginea Maritima* (Linne) Baker (nat. ord. Liliaceae), deprived of its dry, membranaceous outer scales, and cut into thin slices, the central portions being rejected. show on the upper and lower surface a thin-walled epidermal

layer. In narrow segments, about 5 cm. long, slightly translucent, yellowish-white or reddish, brittle and pulverizable when dry, tough and flexible after exposure to damp air; inodorous; taste muciliginous, bitter, and acrid.

Preparations: Acetum Scillae. Extractum Scillae Fluidum. Tinctura Scillae.

The powder is light yellow, with a tendency to cake in U.S.P. 1900 p.390. consisting of very irregular fragments; when examined under the microscope, it exhibits numerous single Scilla. Squill. scales of long raphides of calcium oxalate;

The bulb of *Urginea maritima* (Linne) Baker (Fam. Liliaceae), deprived of its dry, membranaceous outer scales, cut into thin slices and carefully dried, the central portions being rejected.

In irregular, more or less curved, somewhat translucent, yellowish-white or reddish-white segments, 3 to 5 cm. long, brittle and pulverizable when dry, tough and flexible when damp; odor slight; taste muciliginous, bitter and acrid. Average dose. - 0.125 gm. = 125 milligrammes (2 grains.)

U.S.P. 1910. p.371. Metric, 0.1 gm. - Apothecaries, 1-1/2 grains.

Scilla. Squill. Scill.

The fleshy inner scales of the bulb of the white variety of *Urginea maritima* (Linne) Baker (Fam. Liliaceae), cut into pieces and carefully dried. Preserve Squill in tightly-closed containers, in a dry place. If made into the official tincture and assayed biologically, the minimum/lethal dose should not be greater than 0.006 mil. of tincture, or the equivalent in tincture of 0.0000005 gm. of ouabain, for each gramme/of body-weight of frog.

In irregular, more or less curved, somewhat flattened pieces from 0.5 to 5 cm. in length, yellowish-white, somewhat translucent, nearly smooth and lustrous with slight projections of fibrovascular bundles; brittle when dry and somewhat flexible when damp; odor slight; taste bitter and acrid.

Under the microscope, sections of the scales of Squill show on the upper and/lower surface a thin-walled epidermal

layer, a mesophyll of nearly isodiametric/ or slightly elongated thin-walled cells and occasionally show in alcoholic or/glycerine mounts spheroidal aggregates of a carbohydrate; numerous more or less/ rectangular cells containing mucilage and bundles of raphides of calcium oxalate,/ the latter from 0.075 to 1.0 mm. in length; fibro-vascular bundles few and isolated,/ with spiral or reticulate tracheae. Occasionally some of the parenchyma cells/contain a few somewhat spherical starch grains.

The powder is light yellow, with a tendency to cake in moist atmosphere and/consisting of very irregular fragments; when examined under the microscope/ it exhibits numerous single crystals and bundles of long raphides of calcium/ oxalate; fragments of thin walled, colorless parenchyma, frequently with/ dark intercellular spaces due to the inclusion of air; fragments with spiral/ or reticulate tracheae are occasionally found.

Squill yields not more than 8 per cent. of ash.

Assay - For a method of assaying Squill see Biological Assays (Part II).

Preparations - Acetum Scillae Fluid extractum Scillae, Syrupus Scillae (from/vinegar) Syrupus Scillae Compositus, (from Fluid extract) Tinctura Scillae.

Average Dose - Metric, 0.1 gm. - Apothecaries, 1-1/2 grains.

U.S.P. 1920. p.329.

U.S.P. Scilla. Squill. Scill.

Squill is the cut and dried fleshy inner bulb scale of the white variety/of *Urginea maritima* (Linne) Baker (Fam. Tiliaceae).

Squill, in the form of the tincture, properly diluted and injected into/ the ventral lymph sac of a frog, has a minimum systolic dose (minimum/ dose producing in one hour a stoppage of the ventricle of the heart in/systole) not exceeding 0.006 cc. of tincture, equivalent to 0.00,000,05 gm./ of ouabain, for each gm. of body weight of frog.

Irregular, curved or flattened pieces, from 0.5 to 3 cm. in length; yellowish-white, somewhat translucent; brittle when dry, and tough/ and flexible when damp; odor slight; taste bitter, muciliginous and acrid.

Description and physical properties. Unground Squill-Irregular, curved or flattened pieces, from 0.5 to 5 cm. in length; yellowish-white, somewhat translucent; brittle when dry, and tough and flexible when damp; odor slight; taste bitter, muciliginous and acrid.

Structure - Upper and lower epidermal layers of thin-walled cells with few stomata; mesophyll of slightly elongated thin-walled cells, sometimes containing spheroidal aggregates of a sugar; occasional bundles of spiral and reticulate tracheae; numerous, elongated mucilage cells containing raphides of calcium oxalate; few spheroidal starch grains in the parenchyma.

Powdered Squill - Light yellowish-brown; very hygroscopic, caking in moist atmosphere; raphides of calcium oxalate numerous, up to 1 mm. in length, isolated and in bundles imbedded in mucilage; fragments of thin-walled parenchyma with occasionally spiral and reticulate tracheae; very few starch grains.

Assay- Prepare a tincture according to the official process and proceed as directed under *Tinctura Digitalis*. Preserve in tightly-closed containers, in a dry place.

Preparation - *Acetum Scillae*, *Fluid extractum Scillae*, *Syrupus Scillae* (from Vinegar), *Syrupus Scillae Compositus* (from Fluid extract), *Tinctura Scillae*.

Average Dose - Metric, 0.1 Gm., - Apothecaries, 1-1/2 grains.

Not mentioned.

U.S.P. 1930. p. 328.

Scilla. Squill.

Scilla.- *Scillae* bulbus, P. I.

Squill consists of the cut and dried fleshy inner scale of the bulb of the white variety of *Urginea maritima* (Linne) Baker (Fam. Liliacea), known in commerce as White Squill.

Description and physical properties - Unground Squill - Irregular, curved or flattened pieces, from 0.5 to 5 cm. in length; yellowish-white, somewhat translucent; brittle when dry, and tough and flexible when damp; odor slight; taste bitter, muciliginous and acrid.

Not mentioned.

Structure - Upper and lower epidermal layers of thin-walled cells with a few stomata; mesophyll of slightly elongated thin-walled cells, sometimes containing spheroidal aggregates of a sugar; occasional concentric bundles containing spiral and reticulate tracheae; numerous elongated mucilage cells containing raphides of calcium oxalate; few spheroidal starch grains in the parenchyma.

Powdered Squill - Light yellowish-brown; very hygroscopic, caking in moist atmosphere; raphides of calcium oxalate numerous, up to 1 mm. in length isolated and in bundles frequently imbedded in mucilage; fragments of thin walled parenchyma with occasionally spiral and reticulate tracheae, very few starch grains. Fragments of red, pink or purple epidermal or parenchyma bulb-scale tissue, absent (red squill).

Storage - Preserve Squill in well-closed containers and in a dry place.

Preparations - Acetum Scillae, Syrupus Scillae (from Vinegar), Tinctura Scillae.

Bulb of the Squill, U.S.P. 1830 (N.Y.)

N. F. 1888

Not mentioned.

N. F. 1896

Not mentioned.

N. F. 1906

Not mentioned.

N. F. 1916

Not mentioned.

N. F. 1926

Not mentioned.

N. F. 1936

Not mentioned.

Part Used SUMMARY OF U.S.P. and N.F. DATA OF SCILLA.

Where and When Official -

U.S.P. 1820, '30 (N.Y.), '30 (Phil.), '40, '50, '60, '70, '80, '90, 1900, '10, '20, '30.

Official Latin Title:

Scillae Radix, U.S.P. 1830 (N.Y. central portions being rejected. U.S.P. 1880, 1900, 1930.)
Scilla, U.S.P. 1820, '30 (Phil.), '40, '50, '60, '70, '80, '90, 1900, '10, '20, '30. the bulb of the white variety of, U.S.P. 1910.

Official English Title: fleshy inner bulb scale of,

Squill, U.S.P. 1820, '30 (Phil.), '40, '50, '60, '70, '80, '90, 1900, '10, '20, '30. inner scale of the bulb of, U.S.P. 1930.

Bulb of the *Squill*, U.S.P. 1830 (N.Y.)

Official Description, U.S.P. 1830 (N.Y.), '80, '90, 1900,
Official Abbreviations:

Scilla, U.S.P. 1910, '20, '30.

Official Synonym:

Extractus Scillae Fluidum, U.S.P. 1860, '90,
Scillae bulbus, P.I., U.S.P. 1930.
Fluidextractum Scillae, 1910, '20; N.F. 1936.

Scientific Name: *Scilla* Compositus, U.S.P. 1880, 1910, 1930,
N.F. 1930.

Scilla maritima, U.S.P. 1820, '30 (N.Y.), '30, (Phil.), '40, '50, '60, '70., U.S.P. 1910, '20, '30.

Urginea Scilla Steinheil, U.S.P. 1880., '20, '30.

Urginea Maritima (Linn) Baker, U.S.P. 1890, 1900, '10, '20, '30.

Part Used. *Reservations:*

Tightly-closed containers, in a dry place, U.S.P. 1930.
 '20. The root, U.S.P. 1820.

The bulb, U.S.P. 1830 (N.Y.), '30 (Phil.), '40, '50, '60, '70.

Official The sliced bulb of, U.S.P. 1880.

The bulb of --- deprived of its dry, membranous outer scales, and cut into thin slices, the central portions being rejected. U.S.P. 1890, 1900.

The fleshy inner scales of the bulb of the white variety of, U.S.P. 1910.

The cut and dried fleshy inner bulb scale of, U.S.P. 1920.

The cut and dried fleshy inner scale of the bulb of, U.S.P. 1930.

Official Description, U.S.P. 1830 (N.Y.), '80, '90, 1900, '10, '20, '30.

Official Preparations:

Acetum Scillae, U.S.P. 1880, '90, 1910, '20, '30.

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

Fluidextractum Scillae, 1910, '20; N.F. 1936.

Syrupus Scillae Compositus, U.S.P. 1880, 1910, 1920, N.F. 1930.

Syrupus Scillae, U.S.P. 1910, '20, '30.

Tinctura Scillae, U.S.P. 1880, '90, 1910, '20, '30.

Oxymel Scillae, N.F. 1888, '96, 1906, '16, '26.

Official Preservation:

Tightly-closed containers, in a dry place, U.S.P. 1910, '20.

Well-closed containers and in a dry place, U.S.P. 1930.

Official Dose:

As a diuretic, gr. 1 to gr. VI, U.S.P., 1830 (N.Y.);
0.125 Gm., (2 grains), U.S.P. 1900; 0.1 Gm., 1-1/2 grs.,
1910, '20.

APPROVED:

W. K. RichtmannProf. of Pharmacognosy

DATE:

June 4, 1940

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