Skunk cabbage, in spite of its peculiar aroma, apparently gives no volatile oil, although the aqueous distillate possessed some odor, was slightly acid, and deposited a minute amount of white sediment. There were no indications of glucosides but possibilities of the presence of some alkaloids.

Wild Ginger yielded a small amount of oil which had a very strong pungent odor. It solidified at —4 to —5° C. and had a refractive index of 1.5195 at 22°. There were indications also of acid resins and alkaloids, but probably no glucosides.

Salal, although a member of the genus *Gaultheria* which universally gives methyl salicylate, gave no indication of a volatile oil, even after long maceration with acidified water. The aqueous distillate was first cloudy and later precipitated but had very slight odor. The precipitate was probably a hydrocarbon but was not very carefully examined because of the small amount. During the water extraction a similar white precipitate appeared on cooling, indicating waxy hydrocarbons which give the leaves their shiny nature. There was no evidence of the presence of any glucosides and but slight tests for alkaloid.

Tea Vine was found to contain a small amount of volatile oil accompanied by the deposition of a solid material, thus according with results previously reported on this plant. Distillation of larger quantities of the vine, however, gave but traces of oil and it has since been found that drying seems to dissipate the volatile components almost entirely. The water extract deposited what was apparently the same solid observed in distillation. No indications of the presence of glucosides or alkaloids could be obtained.

Work is now under way in this laboratory to examine more carefully all of these plants and others of the numerous herbs and shrubs in the state. Particularly are we interested in wild parsnip, water hemlock, salal, and dog fennel.

REFERENCES.

(1) Howell, "Flora of Northwest America," (1903). Fry and Rigg, "Northwest Flora," (1920). Piper Beattie, "The Flora of the Northwest Coast," (1915).

(2) Power, PROCEEDINGS A. PH. A., 28, 464 (1880); *Pharm. Rundsch.*, 6, 101 (1888). *Jour. Chem. Soc.*, 81, 59 (1902).

(3) Blanchet and Sell, *Ann.*, 6, 296 (1833). Petersen, *Arch. Pharm.*, 226, 89 (1889).

(4) Miller, *Ibid.*, 240, 371 (1902).

(5) Asahina, *J. Pharm. Soc. Japan*, p. 361 (1907). Schimmel, Report, p. 115 (1907).

(6) Power and Klaber, *Pharm. Rundsch.*, 13, 228 (1895).

(7) De Vrij, *Pharm. J.*, 2 (3), 503 (1871). Koehler, *Berl. Ber.*, 12, 246 (1879).

(8) Power and Salway, *J. Am. Chem. Soc.*, 30, 251 (1908).

(9) Murayama, *J. Pharm. Soc. Japan*, p. 783 (1911).

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August 20, 1925.

CHANGES IN U. S. PHARMACOPŒIA X.

BY E. FULLERTON COOK.*

It has been found necessary to make the following changes in the United States Pharmacopœia, Tenth Revision. These alterations have been made in the plates so that recent printings need not be corrected.

* Chairman U. S. P. Revision Committee.

Acidum Sulphuricum Aromaticum, page 27—

Add the following statement: "Alcohol content, by volume, 82 to 85 per cent."

Aethylmorphinæ Hydrochloridum, page 37—

Change the second test for identity to read: "Add a drop of ferric chloride T.S. to a solution of about 0.01 Gm. of the salt in 10 cc. of sulphuric acid, and warm it on a water bath: the mixture will become at first green, then deep-violet blue, and, after the addition of a drop of nitric acid, deep red."

Benzoinum, page 78—

Change the last test for identity to read: "Treat about 1 Gm. of powdered Benzoin with 15 cc. of warm carbon disulphide, filter, wash the filter with an additional 5 cc. of carbon disulphide, and allow the filtrate to evaporate spontaneously: the residue is not less than 12.5 per cent. This residue responds to the tests for identity under *Acidum Benzoicum.*

Bismuthi Subnitras, page 81—

Change the first test for purity to read: "Boil 1 Gm. of Bismuth Subnitrate with 20 cc. of a mixture of equal volumes of acetic acid and distilled water. Cool and filter. Add 2 cc. of hydrochloric acid, remove the bismuth by the addition of hydrogen sulphide, boil the mixture, and filter: the filtrate leaves not more than 0.005 Gm. of residue on evaporation and gentle ignition (*zinc, alkali earths, or alkalies*)."

Codeinæ Sulphas, page 115—

Change the third test for purity to read: "A solution of 0.5 Gm. of Codeine Sulphate in 15 cc. of distilled water requires not more than 0.3 cc. of fiftieth-normal sodium hydroxide for neutralization, using one drop of methyl red T.S. as indicator."

Collodium, page 118—

Add the following statement: "Alcohol content, by volume, 22 to 24 per cent."

Collodium Flexile, page 118—

Add the following statement: "Alcohol content, by volume, 21 to 23 per cent."

Fluidextractum Cinchonæ, page 165—

In the menstruum the "100 cc. of hydrochloric acid" should be "100 cc. of *diluted* hydrochloric acid."

Glycerinum, page 180—

In the last test on page 180 the amount of glycerin to be used for the test should be 50 *Gm.* not "50 cc."

Infusum Digitalis, page 197—

Add the following statement: "Alcohol content, by volume, 8.5 to 9.5 per cent."

Linimentum Chloroformi, page 204—

Add the following statement: "Alcohol content, by volume, 43 to 47 per cent."

Linimentum Saponis, page 205—

Add the following statement: "Alcohol content, by volume, 62 to 66 per cent."

Linimentum Saponis Mollis, page 205—

Add the following statement: "Alcohol content, by volume, 28 to 32 per cent."

Liquor Ferri et Ammonii Acetatis, page 214—

Add the following statement: "Alcohol content, by volume, 4 to 6 per cent."

Liquor Potassii Arsenitis, page 222—

Add the following statement: "Alcohol content, by volume, 1 to 3 per cent."

Mistura Glycyrrhizæ Composita, page 241—

Add the following statement: "Alcohol content, by volume, 9 to 11 per cent."

Oleum Cari, page 253—

The refractive index should read: "1.4840 to 1.4880 at 20° C."

Talcum Purificatum, page 379—

The "Note" should read: "Purified Talc is intended only as a filtering medium and for this purpose should not be finer than the powder which passes through a No. 80 sieve but is retained by a No. 100 sieve."