

tained for the powder itself, the toxicities and extinctions were compared in terms of Sample 2, the total alcoholic extract.

Acetyl Determinations.—Acetyl determinations were made by the procedure of Clark (1).

Lead Tetraacetate Oxidations.—A weighed sample of approximately 0.1 Gm. was acetylated with a mixture of 1 cc. of acetic anhydride and 1 cc. of anhydrous pyridine. After standing overnight the mixture was treated with 10 cc. of approximately 0.1 *N* lead tetraacetate in glacial acetic acid, allowed to stand for twenty-four hours, and an excess of aqueous potassium iodide containing 50 Gm. of sodium acetate per 100 cc. was added. The liberated iodine was titrated with standard 0.1 *N* sodium thiosulfate. Blanks were run at the same time to standardize the procedure.

Liebermann Reaction.—A spectrophotometric study of the color obtained in the Liebermann reaction was made with a Beckman Model DU Spectrophotometer. To 0.4 mg. of scilliroside fraction Sample 7, dissolved in 1 cc. of glacial acetic acid was added 2 cc. of acetic anhydride and 0.1 cc. of concentrated sulfuric acid. The blue-green solution was compared with a blank prepared from the reagents. The absorption maximum, thirty minutes after mixing, was at 625 $m\mu$, and shifted to 675 $m\mu$ during the next fifteen minutes, remaining in this position for at least three hours. The intensity of the absorption maximum increased gradually at first, reaching its highest value after 105 minutes, and then decreased. A minimum absorption was observed at about 500 $m\mu$ which remained fairly constant during a four-hour period. For comparison, a sample of cholesterol similarly treated showed a maximum absorption near 650 $m\mu$ with an intensity of about one-fourth that of scilliroside and a minimum at 520 $m\mu$ with an intensity about equal to that of scilliroside.

For the routine comparison of squill fractions the evaporated extract was dissolved in 2 cc. of glacial acetic acid and treated with 2 cc. of acetic anhydride and 0.1 cc. of sulfuric acid. The color was measured with a Klett-Summerson photoelectric colorimeter, using a No. 66 red filter. The scilliroside fraction, Sample 7, was used as a standard. The maximum color was developed after about forty minutes and remained essentially constant for the next half-hour. The color developed in a series of concentrations of the scilliroside fraction did not follow Beer's law, but a smooth curve was obtained which could be reproduced with reasonable accuracy over the range of 0.1 to 0.5 mg. The colorimeter readings corresponding to 0.2 and 0.4 mg. of scilliroside fraction were 210 and 362, respectively.

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WHO MAKES IT?

The National Registry of Rare Chemicals, Armour Research Foundation, 33rd, Federal and Dearborn Streets, Chicago, Ill., seeks information on sources of supply for the following chemicals:

Methylene sulfate	5-Bromo-2-amino- <i>n</i> -valeric acid
2,2'-Biimidazole	Methyl-2-amino-3-chloropropionate hydrochloride
2-Chloro-3-mercaptoproiponic acid	3-Ketolauric acid
Dimethyldibenzylammonium hydroxide	Desoxyribose-5-phosphoric acid
β -Collidine	Ribose-5-phosphoric acid
7-Aminoquinaldine-5-carboxylic acid	Eriodictyol
3,3-Dimethylglutaric acid	1,7-Diiodoheptane
2-Chlorocyclohexanone	Soya lipase
2-Phenyl-1,3-indanedione	4,8-Diaminoquinoline
4-Amino-2-thiopyrimidine	4-Bromocyclohexanone
2,5-Dimethyl-4-aminopyrimidine	4-Methyl-4-bromocyclohexanone
Barbatinic acid	Adenine thiomethyl pentoside
4-Amino-8-nitroquinoline	Phosphorylthiocholine
Obtusatic acid	L-Mannose