

## ASSAY OF FLUIDEXTRACT OF SANGUINARIA.

(Blome's Modification of Schlotterbeck's Method.)

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The following is Blome's modification of Schlotterbeck's method for the assay of sanguinaria, adapted to the fluidextract:

Fluidextract .....	5 Ccs.
Ether .....	q. s.
Chloroform .....	q. s.
Alcohol 95% .....	q. s.
Ammonia Water .....	4 Ccs.
Water .....	q. s.
Sulphuric Acid N/10.....	10 Ccs.
Potassium Hydrate N/50.....	q. s.
Phenolphthalein .....	q. s.

Shake 5 Ccs. of the fluidextract well for one minute with 10 Ccs. of water, 4 Ccs. ammonia water, and 20 Ccs. ether. Let separate completely and draw off ether. Shake out aqueous solution with 15 Ccs. of ether. After drawing off the ether, add 5-10 Ccs. of 95% alcohol, as a black finely divided deposit occurs at this point (if not after the first shake out), which apparently retains some alkaloid. The sediment is probably extractive, precipitated by the extraction of the alcohol with the ether. Shake with successive portions of 10 Ccs. of ether until a small amount of ether (after evaporation, and treatment with dilute HC) gives no precipitate with Mayer's reagent, four treatments usually being sufficient.

Evaporate the ether, dissolve the residue in a few (preferably two or less) Ccs. of chloroform, add 5 Ccs. (measured) of N/10  $H_2SO_4$  and 10 Ccs. of water. Evaporate the chloroform, stir well, and when cool, filter solution through paper into a 100 Cc. volumetric flask, or graduate. Repeat the extraction of the alkaloid in the same manner from the gummy residue, using decreasing amounts of 3 and 2 Ccs. of N/10  $H_2SO_4$ . Rinse the beaker, and wash filter with water.

Precipitate alkaloid with excess of Mayer's reagent, shake well, make up to 100 Ccs. with water and mix thoroughly.

Filter through dry paper, collect 50 Ccs., decolorize with sodium thiosulphate if necessary, and titrate the excess of acid with N/50 KOH, using phenolphthalein as indicator.

Multiply the number of Ccs. of acid required by 50 Ccs. of the clear filtrate by .035 and the result by 40 to obtain grams of alkaloid per 100 Ccs. of fluidextract.

NOTE—In shaking out with ether the author prefers to pour the ether out of the top of the separator, after drawing off as much as possible of the aqueous portion. The results as obtained—good, bad and indifferent—are all given. They show besides the value of the method, the deterioration of the fluidextract. It was found preferable to work on 5 Cc. rather than 10 Cc. portions.

The results obtained April 10, 1911, were by a junior pharmacy student, who

had no experience in drug assaying and simply followed directions, which speaks well for the method.

Date of Assay	Amount Worked On	Gms. Alkaloid per 100 Ccs.	Remarks
February 21, 1911.....	10 Ccs.	2.58 2.52	
March 29, 1911.....	5 Ccs.	3.23 3.17	Work interrupted. Probably absorbed ammonia upon standing for some time.
April 10, 1911.....	5 Ccs.	2.77 2.69	L. P. Griesmer assayed.
May 25, 1911.....	5 Ccs.	2.60 2.02	Deposit in bottle. Inexplicably bad.
May 31, 1911.....	5 Ccs.	2.41 2.35	
June 1, 1911.....	10 Ccs.	2.23 2.31	

Laboratory of Prof. Charles H. LaWall.

### THE QUALITY OF SERVICE.

"No druggist can make headway selling disinfectants if the odor of his soda fountain is like that of a fish market on Sunday. No druggist can pose as an authority on razors, shaving soap or bay rum who has three days' scraggly growth of whiskers on his chin. Toilet preparations will not be bought from a man in a dirty collar and soiled hands. To sell an article a man must seem to be an authority on it, and to be an authority he must show some evidence of having used the article he is selling.

"All these things are simply branches of that one item of *service*. I would rather have a clean, polite clerk who couldn't tell moth balls from menthol after he smelled them, than a dirty, grouchy graduate from the best pharmaceutical college in Christendom! You can teach a man pharmacy, but you can no more teach politeness and cleanliness to a man than you can teach a razor-back hog to be a Berkshire! It's got to be born in the man and the hog! Pick your clerks with this in mind, and then every morning when you open your pill parlor ask yourself the question, 'What can I do today to better the *service* of this store?' and then keep right on repeating it after each customer, like a schoolboy adding the word 'Excelsior' after each verse of Longfellow's poem by that name. Make this the chorus of your song, make it the aim of your life, and you will as surely succeed in business as the sun shines.

"Ready-made success can be handed to no man! He's got to make it for himself, and the one item of *service* will go further toward it than any other. To win without it is about as easy as it is for a canary bird to teach a rattlesnake to turn handsprings!"—*Roe Fulkerson in So. Pharm. Journal.*