

## Contributed and Selected

### COMPARATIVE ALKALOIDAL STRENGTH OF HYDRASTIS ROOTLETS AND RHIZOME.\*

CHARLES H. LA WALL.

Some time ago a client called me up on the telephone and asked which contained the greatest amount of alkaloids, the rhizome or rootlets of hydrastis. I told him that I did not know but would try and find out. I could find neither any reference in literature bearing on the subject nor could I find anybody else who could answer the question among about a dozen chemists whom I consulted.

My client then submitted samples and data which form the basis for this short contribution.

A lot of hydrastis weighing 98 pounds net was seen to consist of such a large proportion of rhizomes that it was deemed advisable to make a complete separation and separate assays for guidance in future purchases. Upon cleaning the drug and separating the rootlets from the rhizomes the following fractions were obtained:

Rhizomes .....	45 1/2 lbs.
Rootlets .....	48 lbs.
Dirt and dust.....	3 5/16 lbs.
Loss in cleaning (unaccounted for).....	1 3/16 lbs.
Total .....	98 lbs.

Of the 93 1/2 pounds of hydrastis 48.66% was rhizomes and 51.34% was rootlets. Upon assaying these separately the rhizomes were found to assay 2.48%, while the rootlets were found to assay only 1.38% of hydrastine. The total assay of the mixed drug in its original condition, from these figures, must have been 1.92%, which is slightly lower than the U. S. P. standard drug.

The answer to the original question, however, is that hydrastis rhizomes are between 1.5 and 2 times as rich in alkaloids as the rootlets.

### A NEW AND RELIABLE METHOD FOR THE PRESERVATION OF ERGOT PREPARATIONS.\*

PAUL S. PITTENGER AND CHAS. E. VANDERKLEED.

The deterioration of ergot preparations has for several years occupied the attention of various investigators, but until the present no one has succeeded in devising a method by which these preparations can be put on the market in a form

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