

determinations show fair agreement for total extractive. The range of variation is 0.5 per cent and less. But there is the same or even greater variation in the figures for volatile extractive. This is so large relatively to the small amount present as to compromise the determination utterly for any precise use. (It may be surmised that the omission of extractive from the U.S. standard may be due to its extreme variability.) The use of commercial ether gives values 0.7 to 2.25 higher for total and non-volatile, apparently not affecting the volatile.

*Quercitannic acid.*

Parry states 8 to 13 per cent.

U.S. standard: Not less than 8 per cent.

The determination was made at this laboratory only.

Method used is given in U.S.A. Bulletin 107, p. 164. (Löwenthal.)

18 samples gave *slightly* less than 8 per cent.

Number.	p. c.	Number.	p. c.
78939	7.7	79929	6.9
78941	7.7	79930	7.8
78942	7.7	80818	7.0
78944	7.2	80825	7.4
78850	7.2	80881	7.7
80414	6.9	80886	7.7
79921	7.1	80887	7.4
79922	7.9	78653	7.7
79923	7.4	78664	7.7

4 samples gave *markedly* less than 8 per cent.

Number.	p. c.	
78937	5.9	Only allspice tissues detected.
78944	3.6	Contained cocoanut shells.
79924	5.1	Contained some ground shells.
80821	5.5	Was a mixture of spices.

The work above reported was mainly done by Mr. V. Kitto, assisted by Mr. L. E. Johnson of this staff; and it should furnish your Advisory Board with data upon which to draw up specifications for definition of this spice.

Three samples are found to be adulterated under Section 3 (a) and (b) namely:

No. 71287, Paprika, containing maize starch.

No. 78944, Allspice, containing foreign shells.

No. 79924, Allspice, containing foreign shells.

In the last named sample, the amount of foreign matter is small, and may possibly have been introduced accidentally.

I beg to recommend publication of this report as Bulletin No. 403.

I have the honour to be, Sir,  
Your obedient servant,

A. MCGILL,  
*Chief Analyst.*