In dealing with grain smuts, however, where the strength of the solution is not so necessarily guarded, this substance has been found to be decidedly beneficial. The Experimental Department of this College has done some extended work in dealing with smutted grain, and report the following results in connection with bluestone treatment with oats:*

<i>(a)</i>	Copper	-	su	ılj	pl	ha	at	e					e.	e.	i.	 					×			 o		I	pound.
	Water .	•								÷					÷			*								25	gallons.
(<i>b</i>)	Copper	1	st	1	pl	h	at	e	١,			,					 				,	,		•		I	pound.
	Water																	2.1	 							I	gallon.

In solution (a) smut affected grain was immersed for a period of 12 hours; and in (b) for a period of 5 minutes. After treatment the grain was dried and sown in test plots, along with a check plot of some left untreated. An average of three years' trial gave these data:

Percentage of smutted heads.

(a) treatment				÷	×				÷	à.	÷		 6.5		÷	÷	÷	*	 0.2
(b) treatment			e,				•)		×										I.I
Untreated							 									÷			7.0

These results show that bluestone has a very decided action in checking smut, and this is especially marked with treatment (a).

Pyrox.

This is a combined fungicide and insecticide, being constituted largely of Bordeaux and lead arsenate mixed together, the mixture containing enough water to keep it in a pastey condition. It would evidently fulfil collectively the same functions as its two ingredients would accomplish singly. It has been used experimentally with very satisfactory results.

Following is the analysis as given by the Bureau of Chemistry, Washington, D.C.:

Water	50.00	per	cent.
Lead oxide (PbO)	27.00		66
Copper oxide (CuO)	2.50	66	66
Arsenic oxide (As ₂ O ₅)	9.00	66	**
Sulphur trioxide (SO ₃)	0.70	66	66
Calcium oxide (CaO)	.75	66	66
Insol. matter, water of crystallization and un-			
determined material	10.05	**	**
	100.00		

*Ont. Agri. College Bulletin 140, pp. 14-15.