

Table VII. Phosphorus Extracted by Chemical Methods from Beltsville Silt Loam Treated with Superphosphate and Rock Phosphate (9)

Soil Treatment ^a	Phosphorus Extracted by 6 Methods, Lb./Acre											
	Sodium Bicarbonate		Bray and Kurtz No. 1		Proposed Method		Wenshall and McKibbin		Modified Truog		N. C. Method	
	C ^b	S ^b	C	S	C	S	C	S	C	S	C	S
Superphosphate, ^c 75 lb. P ₂ O ₅ /acre	15	21	22	29	37	42	25	36	25	33	36	45
Rock phosphate ^d												
75 lb. P ₂ O ₅ /acre	3	8	5	10	12	18	48	48	86	88	128	125
300 lb. P ₂ O ₅ /acre	9	13	14	16	27	29	149	152	260	276	472	506

^a See footnotes^a, Table VI, for treatment history.

^b C center section; S south section.

^c Each phosphorus value represents average of 4 replicates.

^d Each phosphorus value represents average of 3 replicates.

Table VIII. Correlation of Soluble Phosphorus Determined by Chemical Methods with Yield of Corn for 1953 and 1954 on Beltsville Silt Loam Treated with Superphosphate and Rock Phosphate (9)

Chemical Method	Correlation Coefficient ^a
Modified Truog	0.123
North Carolina method	0.165
Wrenshall and McKibbin	0.233
Bray and Kurtz No. 1	0.284
Sodium bicarbonate	0.394
Proposed method	0.436

^a Correlation coefficients calculated from 20 observations. At 5% level $r = 0.444$.

Table IX. Yields and Value of Tobacco and Phosphorus Extracted from Monmouth Fine Sandy Loam by North Carolina Method

P ₂ O ₅ Applied, Lb./Acre	Tobacco		Phosphorus Extracted Lb./Acre
	Yield, ^a lb./acre	Value, \$/acre	
0	803	259	13
30	876	420	24
90	942	429	46
180	1000	482	88

^a Average annual yield for 6 years from 4 replicates. Phosphorus extracted *vs.* yield of tobacco, $r = 0.949$. Significant at 1% level. Cooperative project between University of Maryland and U. S. Department of Agriculture.

Table X. Yields and Value of Tobacco and Potassium Extracted from Monmouth Fine Sandy Loam by North Carolina Method

K ₂ O Applied, Lb./Acre	Tobacco		K Extracted, Lb./Acre
	Yield ^a lb./acre	Value, \$/acre	
0	750	350	151
60	846	465	205
120	892	508	311
240	928	603	490
300	917	637	638

^a Average annual yield for 6 years from 4 replicates. K extracted *vs.* yield of tobacco, $r = 0.840$. Significant at 1% level. Cooperative project between University of Maryland and U. S. Department of Agriculture.

Table XI. Nonexchangeable Potassium Removed by Cropping and by Single Heating (500° C.) and Extraction Treatment (6)

Soil	By First Heating and Extraction Treatment, P.P.M.	By Prolonged Cropping, P.P.M.
	Sable	610
Herrick	345	332
Wooster	242	217
Hagerstown	240	128
Decatur	207	122

methods at which phosphate applications often failed to increase the yields of alfalfa in the pot culture experiment were: 55 pounds per acre, modified Truog; 55, Bray and Kurtz No. 1; 55, North Carolina; 35, sodium bicarbonate; and 70, the proposed method.

The correlation coefficient for the relation between potassium extracted from a Monmouth soil by the North Carolina method and the yields of tobacco in a field experiment for a 6-year period was significant at the 1% level. In this same experiment the phosphorus extracted also showed a close relationship with tobacco yields.

The thermal method proposed by Kolterman and Truog showed some

promise for determining the relative potassium-supplying power of soils.

Literature Cited

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Correction

The Toxicology of Butoxypolypropylene Glycol 800 (Crag Fly Repellent)

In this article by C. P. Carpenter, C. S. Weil, P. E. Palm, M. D. Woodside, and H. F. Smyth, Jr. [*J. Agr. Food Chem.* 7, 763 (1959)], on page 763, the sentence beginning in the eighth line of the abstract should read, "It is not stored in the bodies of animals, and 50% or more of a single dose may be found in the feces unchanged."