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TEN WHEAT FIELDS IN "EGYPT"  
A STORY IN FIGURES

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Only 8 bushels of wheat from the land itself, but  $20\frac{1}{2}$  bushels from soil enrichment, making a total average yield of  $28\frac{1}{2}$  bushels per acre,—this is the 1917 record of ten wheat fields on poor land in southern Illinois where the Illinois system of permanent fertility is practiced. The results given in the accompanying table<sup>1</sup> represent the second year of soil enrichment at Sparta; the fifth year (that is, the first year in the second crop rotation) at Enfield, Pana, Toledo, and West Salem; the sixth at Newton and Oblong; the seventh at Unionville; the eighth at Raleigh; and the thirteenth at Fairfield.

<sup>1</sup>The average increase of 5.2 bushels of wheat from 500 pounds of rock phosphate on these ten fields may be compared with 4.2 bushels from 200 pounds of bone meal on the Cutler and Odin fields, which are also located on southern Illinois soils. The increase of 4.2 bushels was obtained in sixty tests involving duplicate trials which extended over a period of fifteen years.

## TEN WHEAT FIELDS IN "EGYPT": A STORY IN FIGURES

(Bushels per acre, 1917)

Soil treatment applied	Pana field	Toledo field	Newton field	Oblong field	West Salem field	Enfield field	Raleigh field	Union- ville field	Sparta field	Fair- field field	Aver- age
None (except crop rotation)...	11.8	9.8	.0	7.5	2.2	8.3	6.3	4.3	10.5	....	6.7
Farm manure . . . . .	12.2	12.8	.3	16.9	6.8	6.2	7.8	8.7	15.0	15.7	10.2
Manure and limestone . . . . .	25.8	27.5	12.3	21.0	10.1	28.2	41.2	15.4	24.2	....	22.9
Manure, limestone, and phos- phate rock . . . . .	32.8	33.6	20.5	30.1	16.8	23.2	39.2	19.3	27.2	31.4	27.4
None (except crop rotation)...	13.0	7.6	3.3	14.4	11.2	4.2	11.2	4.9	18.8	....	9.8
Crop residues . . . . .	20.7	13.8	2.5	20.4	12.5	8.2	15.2	5.3	17.2	9.3	12.5
Residues and limestone . . . . .	31.7	30.2	11.3	28.2	13.0	23.2	37.2	15.6	23.5	....	23.8
Residues, limestone, and phos- phate rock . . . . .	44.2	33.2	18.5	35.3	21.6	32.1	40.5	17.0	25.3	28.8	29.7
Residues, limestone, phosphate, and kainit . . . . .	38.7	35.8	19.5	31.4	23.3	31.3	46.4	19.6	23.5	....	29.9
None (except crop rotation)...	12.2	2.5	.0	13.4	....	5.0	5.3	3.2	16.2	....	7.2

NOTES.—These experiment fields are operated by the University of Illinois. The farm manure is applied in proportion to previous crop yields. The crop residues include corn stalks, straw, clover chaff, and cover crops (as sweet clover seeded with small grain and plowed under the next fall or the following spring before planting corn). Yearly acre-rates of applications are 1,000 pounds of limestone, 500 of raw rock phosphate, and 200 of kainit; or 4,000, 2,000, and 800 pounds, respectively, every four years. (The initial application of limestone is usually 4 tons per acre. It was 6 tons on the Raleigh field. After four or five crop rotations, the phosphate application may be reduced to 200 pounds a year.)