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Fertility Status of Ohio Soils

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OHIO AGRICULTURAL
EXPERIMENT STATION

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FERTILITY STATUS OF OHIO SOILS

(As Shown by Soil Tests)

J. Benton Jones, Jr., H. J. Mederski, O. L. Musgrave¹

INTRODUCTION

This is the second and most complete summary which has been prepared from the results of soil tests made on Ohio soils. The data reported here summarize 104,041 soil test results for field soil samples submitted by Ohio farmers between July 1, 1956 and July 1, 1959 to the Agricultural Extension Service Soil Testing Laboratory, Columbus, Ohio. The data reported include summaries of pH and lime requirements, "available" phosphorus and potassium, and percent organic matter within 87 Ohio counties (Cuyahoga county is not included), 18 major soil areas and 52 associated soil types.

The data are presented in map and tabular form. The numbers of samples submitted to the laboratory during the reported period by county are given in Table 1. The number of soil samples submitted to the laboratory during the reported period exceeds the total number of farms with cultivated crops (104,041 samples versus 83,025 farms²). Each soil sample received by the laboratory represents about 100 acres of cultivated land in Ohio. Although this number is relatively small (from 3 to 44 samples per 1000 acres), the soil test results obtained probably are representative of the county or area from which they were taken.

The methods of soil analysis employed by the Soil Testing Laboratory are given in Table 5. The soil test results were placed on IBM cards for summarization at the Statistics Laboratory, Ohio Agricultural Experiment Station, under the supervision of Dr. C. R. Weaver.³

PRESENTATION OF RESULTS

The figures in this bulletin describe the 18 major soil areas in Ohio (figure 1), the average soil pH by soil type (figure 2), the average lime need by county and soil type (figures 3 & 4), phosphorus and potassium level by county and soil type (figure 4 thru 7), and percent organic matter by county and soil type (figures 8 & 9).

In figure 1, the heavy lines delineate regions of major soil divisions with the light lines delineating the major soil type areas within these regions⁴. There are 18 major soil type areas in Ohio. The numbers found in figures 1, 2, 4, 6, 8 and 10 refer to soil type area as given in the table accompanying figure 1.

Average soil acidity in the major soil type areas is shown in figure 2. In general, the soils in eastern Ohio are more acid than those in western Ohio and as a consequence, the lime requirements of soils in eastern Ohio are greater (figure 4). Four counties (Ashtabula, Geauga, Guernsey and Jefferson) have average lime requirements in excess of 3 tons per acre. On a soil type area basis, the soils in northeastern Ohio (glaciated clays and glaciated sandstones and slates) have a similar high lime requirement.

The average nutrient element content, expressed as the level of available phosphorus and potassium, is given by county and soil type in figures 5 and 6 for phosphorus, and in figures 7 and 8 for potassium. The level of availability is expressed as low, medium and high with the medium categories for phosphorus and high categories for potassium further subdivided. These further subdivisions were necessary in order to give a more precise evaluation of the nutrient element status.

The categories, low, medium and high, refer to the expected probable crop response to the addition of phosphorus or potassium as fertilizer. For example, a low soil test for phosphorus or potassium would

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²1959 Agricultural Census.

³The authors are grateful to Dr. Weaver and his staff for their assistance in preparing the data for publication.

⁴Morse, H. H. and Bone, S. 1958. Understanding Ohio Soils. Ohio Agricultural Extension Bulletin 368.

Table 1. (Continued) Number of Soil Samples Analyzed per County with Number Analyzed per 10 Farms and 1000 Acres within Each County

County	Number ¹ Soil Samples Analyzed	Number ² of Farms	Acres of ³ Cultivated Land X 1000	Number of Samples per 10 crop Farms	Number of Samples per 1000 Culti- vated acres
Madison	2951	827	193.1	36	15
Mahoning	325	569	49.4	6	7
Marion	1471	963	158.2	15	9
Medina	1033	926	84.9	11	12
Meigs	599	410	33.2	15	18
Mercer	1322	1694	207.3	8	6
Miami	1896	1207	157.3	16	12
Monroe	1353	630	30.8	21	44
Montgomery	1699	957	107.4	18	16
Morgan	1041	486	32.9	21	32
Morrow	1226	978	116.0	13	11
Muskingum	692	811	71.7	9	10
Noble	850	452	30.3	19	28
Ottawa	1453	727	94.9	20	15
Paulding	1055	870	186.1	12	6
Perry	462	491	43.3	9	11
Pickaway	2761	1099	197.2	25	14
Pike	492	374	36.8	13	13
Portage	378	716	62.8	5	6
Preble	1077	1219	149.3	9	7
Putnam	1434	1854	229.7	8	6
Richland	1274	877	105.6	15	12
Ross	1084	840	139.2	13	8
Sandusky	728	1383	174.4	5	4
Scioto	681	402	40.9	17	17
Seneca	3403	1610	227.0	22	15
Shelby	1931	1225	160.6	16	12
Stark	571	1276	109.5	5	5
Summit	198	211	20.0	9	10
Trumbull	525	724	60.8	7	9
Tuscarawas	1147	844	69.7	14	16
Union	1494	1111	160.5	13	9
Van Wert	2141	1288	206.0	17	10
Vinton	298	195	14.2	15	21
Warren	1949	861	90.3	23	22
Washington	1301	652	47.5	20	27
Wayne	2506	1890	168.7	13	15
Williams	1719	1320	162.0	13	11
Wood	2941	1886	286.9	16	10
Wyandot	1150	1046	170.9	11	7
Total	104,041	83,025	92,729.2		
			State Average	13	13

¹Samples received during the period 1 July 1956 to 1 July 1959.

²Taken from the 1959 Census of Agriculture, cultivated crop farms only.

³Taken from the 1959 Census of Agriculture, cultivated crop land only.

Table 1. Number of Soil Samples Analyzed per County with Number Analyzed per 10 Farms and 1000 Acres within Each County

County	Number ¹ Soil Samples Analyzed	Number ² of Farms	Acres of ³ Cultivated Land X 1000	Number of Samples per 10 crop Farms	Number of Samples per 1000 Cultivated acres
Adams	1263	1257	68.6	10	18
Allen	945	1194	150.3	8	6
Ashland	1265	976	104.1	13	12
Ashtabula	2129	991	83.2	22	26
Athens	335	468	30.4	7	11
Auglaize	2027	1323	168.8	15	12
Belmont	904	778	53.9	12	17
Brown	802	1488	95.5	5	8
Butler	630	1010	109.4	6	6
Carroll	843	618	53.0	14	16
Champaign	1637	1033	156.9	16	10
Clark	1459	906	134.1	16	11
Clermont	601	755	58.0	8	10
Clinton	3322	1082	140.5	31	24
Columbiana	682	894	80.1	8	9
Coshocton	1376	793	72.0	17	19
Crawford	987	1114	158.9	9	6
Darke	1880	2384	260.0	8	7
Defiance	447	1064	164.9	4	3
Delaware	1371	1091	140.6	13	10
Erie	273	595	71.7	5	4
Fairfield	918	1334	144.8	7	6
Fayette	2936	796	168.0	37	17
Franklin	2101	800	129.9	26	16
Fulton	1479	1667	194.4	9	8
Gallia	651	629	35.3	10	18
Geauga	647	483	35.2	13	18
Greene	915	1019	133.2	9	7
Guernsey	1447	649	48.3	22	30
Hamilton	230	375	27.6	6	8
Hancock	2348	1767	242.4	13	10
Hardin	920	1319	185.5	7	5
Harrison	344	362	31.9	9	11
Henry	1094	1557	209.3	7	5
Highland	1351	1455	145.1	9	9
Hocking	330	152	22.6	22	15
Holmes	667	1449	92.0	5	7
Huron	979	1283	166.0	8	6
Jackson	423	376	24.5	11	17
Jefferson	799	290	27.2	28	29
Knox	1907	1088	111.9	18	17
Lake	116	226	16.7	5	7
Lawrence	501	305	15.4	16	32
Licking	912	1253	142.8	7	6
Logan	1153	1134	146.1	10	8
Lorain	550	901	103.8	6	5
Lucas	524	641	82.5	8	6

DISCUSSION

indicate a condition in which the probable crop response to applied phosphorus or potassium fertilizer would be relatively large. As the soil test level increases from low to high, the probability of a significant response and therefore the likelihood of deficiencies of either phosphorus or potassium decreases.

In general, the relative sufficiency of potassium in Ohio soils is higher than the relative sufficiency of phosphorus as revealed by soil tests. The soils in southeastern Ohio are lowest in available phosphorus while the lake plain soils in northwest Ohio and the glaciated sandstones of eastern Ohio are high (figure 6). The Illinois glaciated loam till in southwestern Ohio is lowest in potassium while the entire western half and southeastern areas of Ohio are high (figure 8).

The soils in southern and southeastern Ohio are lower in organic matter than those in northern Ohio (figure 9). The lake plain soils in northwestern Ohio have the highest organic matter content. The organic matter content of a soil is dependent upon temperature and drainage. As the average mean temperature increases, the organic matter content of the soil decreases. Under poor drainage conditions, organic matter tends to accumulate. The general pattern of organic matter content of soils in Ohio tends to follow these temperature and drainage patterns over Ohio.

The figures are given to provide the reader a panoramic view of Ohio soil nutrient element status. For those desiring specific information, reference should be made to the tables. The soil results are given in three tables as percent distribution of soil test results by county (table 2), by major soil area (table 3), and by soil type (table 4).

The levels of phosphorus and potassium are given in three categories, low, medium and high. These levels are inversely related to the probabilities for obtaining a yield response to the nutrient in question. The phosphorus and potassium data are arrayed in two-way tables in Section A.

The tabular data are presented as percentages of the total number of samples falling into a given category. The pH data are grouped into seven pH classes (6.6 and above, 6.5 to 6.2, 6.1 to 5.8, 5.7 to 5.4, 5.3 to 5.0, 4.9 to 4.6, and 4.5 and below) and six levels of lime deficit (none, 1 to 1½, 2 to 2½, 3 to 3½, 4 to 4½, and 5 or more tons per acre). This information appears in Section B in a two-way table.

In section C of each table the data for organic matter are presented as a summary showing the percentage of soils falling into each of seven classes (0 to 1%, 1½ to 2%, 2½ to 3%, 3½ to 4%, 4½ to 5%, 5 to 20% and above 20%).

This summary provides agricultural workers information regarding the nutrient element status of Ohio soils as measured by soil tests. These data will be helpful in educational programs conducted by the Extension Service and by the fertilizer and lime industry serving Ohio farmers. Fertilizer manufacturers will find this information useful in estimating area needs for various fertilizer materials and grades. Other State and Federal agricultural agencies responsible for the development of certain policies regarding the use of lime and fertilizer can make use of this summary. The data aid in identifying those plant nutrients most likely to be lacking in certain soil areas, and single out areas where additional fertility research is needed.

In general, the soil areas in eastern Ohio are acid in reaction and tend to be low in available phosphorus and in some sections moderately low in available potassium. This does not necessarily mean that the soils in eastern Ohio will always be less productive. These soils require larger quantities of lime, phosphorus and in some instances potassium to bring them up to the same nutrient level as the majority of other soils in Ohio. Once the nutrient level has been raised, these soils can be as productive as any others in the State.

The data presented in this bulletin reflect the general native nutrient element level of Ohio soils. Since fertilizers have been used intensively only during the last decade or so, their influence is not readily seen in this summary of soil test results. It is expected that in future summaries there will be significant changes in the general nutrient element status of Ohio soils. The sharp differences for pH and level of available phosphorus and potassium among soil types will tend to disappear. With the use of lime and fertilizers, soils low in pH and testing low in available phosphorus and potassium can be raised to a higher pH and nutrient element level. How rapidly these soils will change remains to be seen.

Table 5. Laboratory procedure for determining soil pH, lime deficit, available phosphorus and potassium and organic matter content.

Soil pH—the pH was determined with a model No. 2 Beckman Glass-electrode pH meter, on a 1 to 1 soil-water suspension.

¹Shoemaker, H. E., McLean, E. O., Pratt, P. F. Buffer Methods for Determining Lime Requirement of Soils with Appreciable Amounts of Extractable Aluminum. SSSA Proc. In Press 1961.

Lime Deficit—The lime deficit test was made, using the Shoemaker, et. al. lime buffer solution technique.¹

Available Phosphorus and Potassium—Phosphorus was extracted with 0.03N ammonium fluoride in 0.02N hydrochloric acid, using a soil-solution ratio of 1 to 10. After shaking 5 minutes and filtering, 5 ml of the extract was retained for phosphorus determination by the stannous chloride method. The resultant blue color was read with a Bausch and Lomb Spectronic 20 colorimeter. Potassium

was extracted with a solution of 1N ammonium acetate, using a soil-solution ratio of 1 to 3. After shaking 5 minutes and filtering, potassium was determined in the extract using a Perkin-Elmer (52-C) flame photometer.

Organic Matter Content—Organic matter was determined by the wet combustion method (dichromate oxidation), using 0.5 grams of soil and back titration with 0.5N ferrous sulfate to measure the unreduced 1N potassium dichromate.

KEY TO MAP ON NEXT PAGE

- | | | | |
|---|----------------------------|-------------------------------------|---|
| LAKE PLAIN | | ILLINOIS GLACIATED LOAM TILL | GLACIATED CLAY |
| 1. Roselms | 2. Hoytville | 6. Blanchester | 10. Mahoning |
| Paulding | Toledo | Rossmoyne | Trumbull |
| Latty | Nappanee | Avonburg | Elsworth |
| | Fulton | Clermont | |
| | Belmore | Cincinnati | |
| | Tedrow | Loudon | |
| | Rimer | Grayford | |
| | Granby | Edenton | |
| | Wauseon | | |
| | | | GLACIATED SANDSTONE AND SHALE |
| | | | 11. Cambridge |
| | | | Verango |
| | | | Alden |
| GLACIATED CLAY LOAM TILL | RESIDUAL LIMESTONE | | |
| 3. Morley | 7. Bratton | | |
| Blount | Burgin | | GLACIATED SHALE AND SANDSTONE SCL TILL |
| Pewamo | Fairmount | | 12. Wadsworth |
| | Hagerstown | | Rittman |
| | Cedarville | | Wayne |
| | Haddox | | |
| GLACIATED LOAM TILL | | | GLACIATED SANDSTONE |
| 4. Miami | | | 13. Wooster |
| Celina | | | Canfield |
| Crosby | | | Ravenna |
| Brookston | | | Chippewa |
| GLACIATED LOAM TILL WITH SILT MANTLE | | | |
| 5. Fincastle | | | ILLINOIS GLACIATED SANDSTONE AND SHALE |
| Xenia | | | 14. Hanover |
| Russell | | | Fallsburg |
| Reesville | | | Millwood |
| Brookston, Ragsdale | | | Loudonville |
| LACUSTRINE | GLACIATED LIMESTONE | | RESIDUAL SANDSTONE AND SHALE |
| 8. Canadea | 9. Cardington | | 15. Muskingum |
| Lorain | Bennington-Condit | | Wellston |
| Olmsted | Marengo | | Keene |
| Plainfield | | | 16. Westmoreland |
| Chenango | | | Muskingum |
| Wilmer | | | 18. Westmoreland |
| | | | Meigs-Muskingum |

MAJOR SOIL AREAS

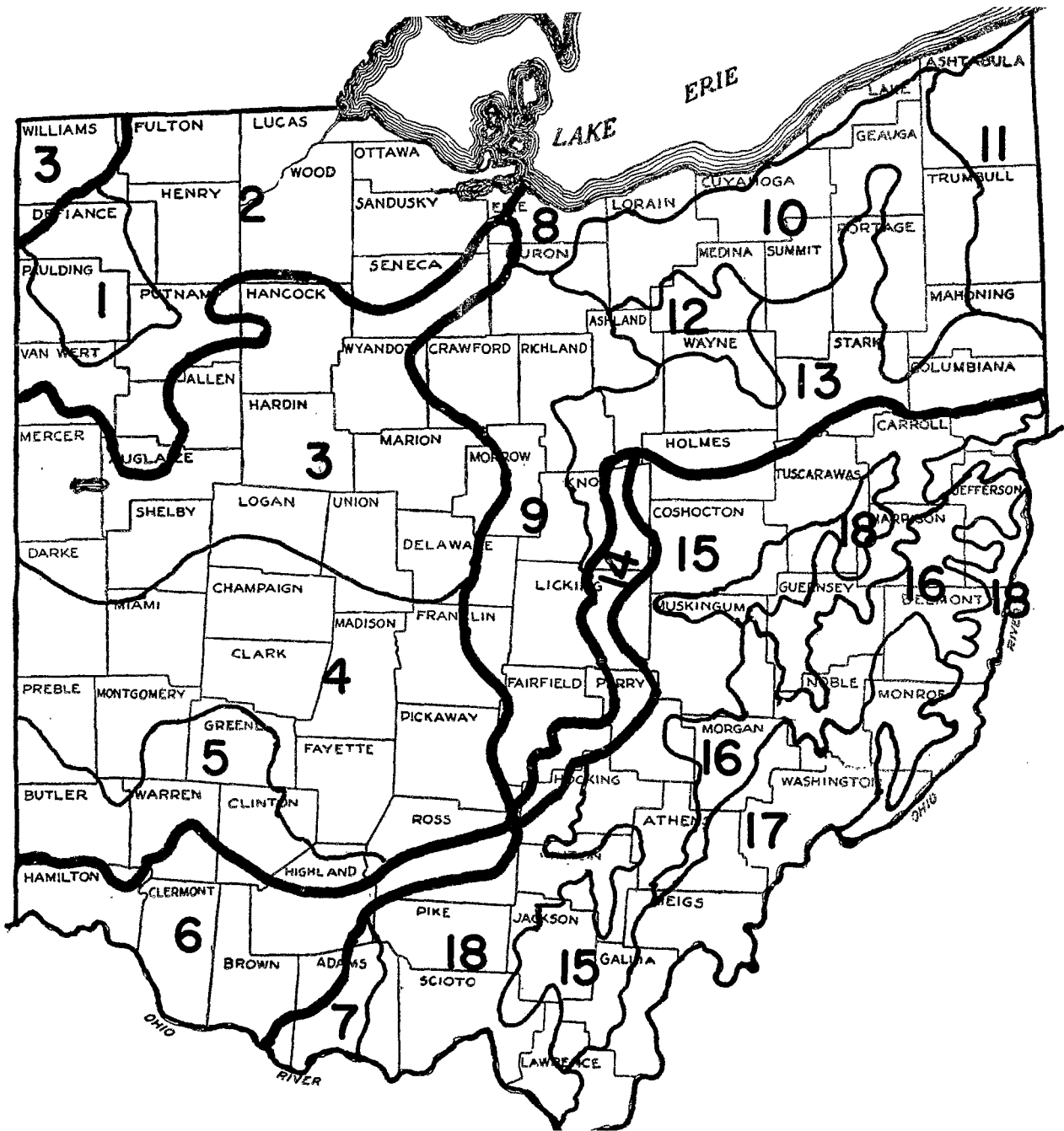


Figure 1. Major Ohio soil areas.

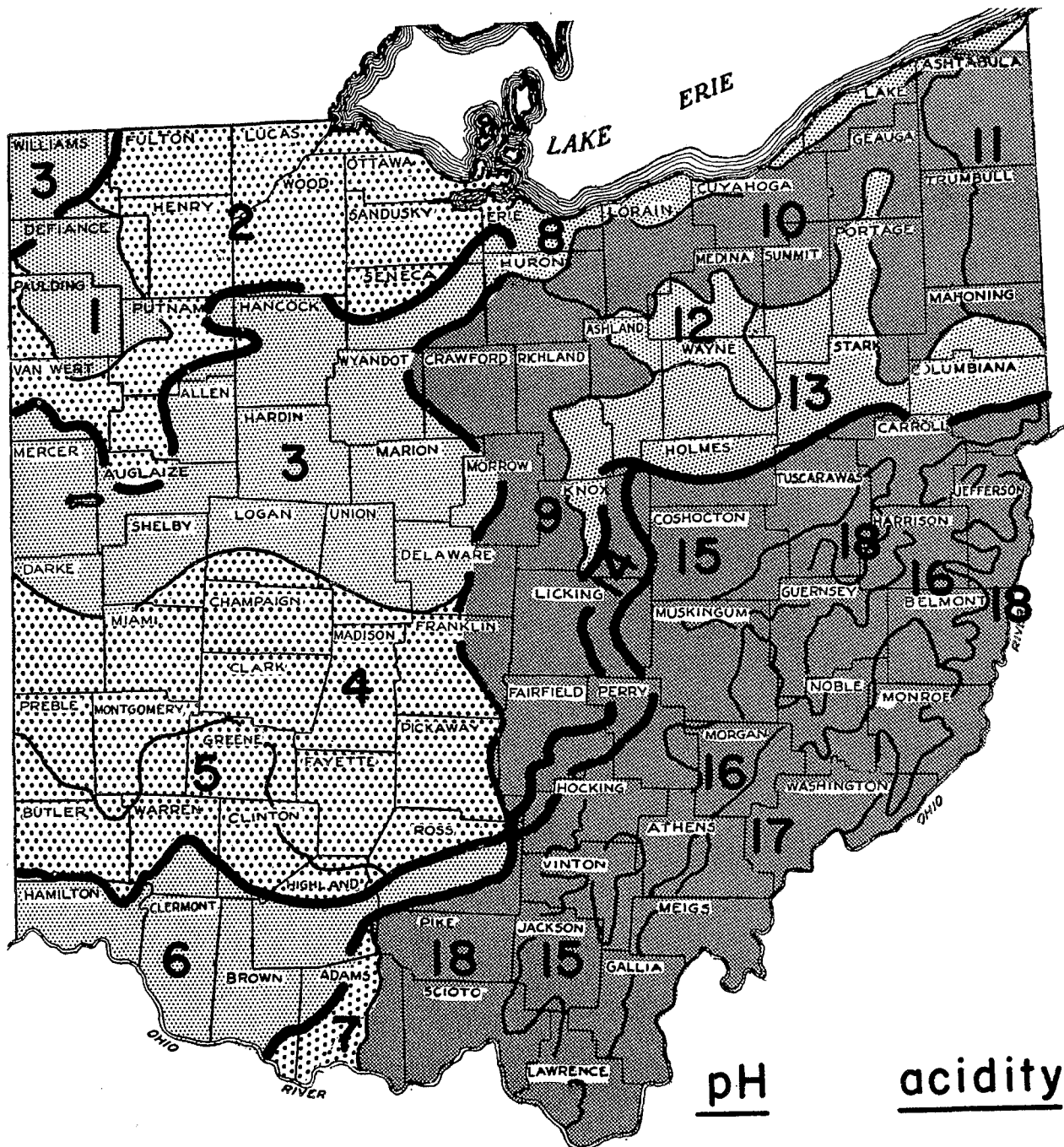


Figure 2. Soil acidity by soil areas.

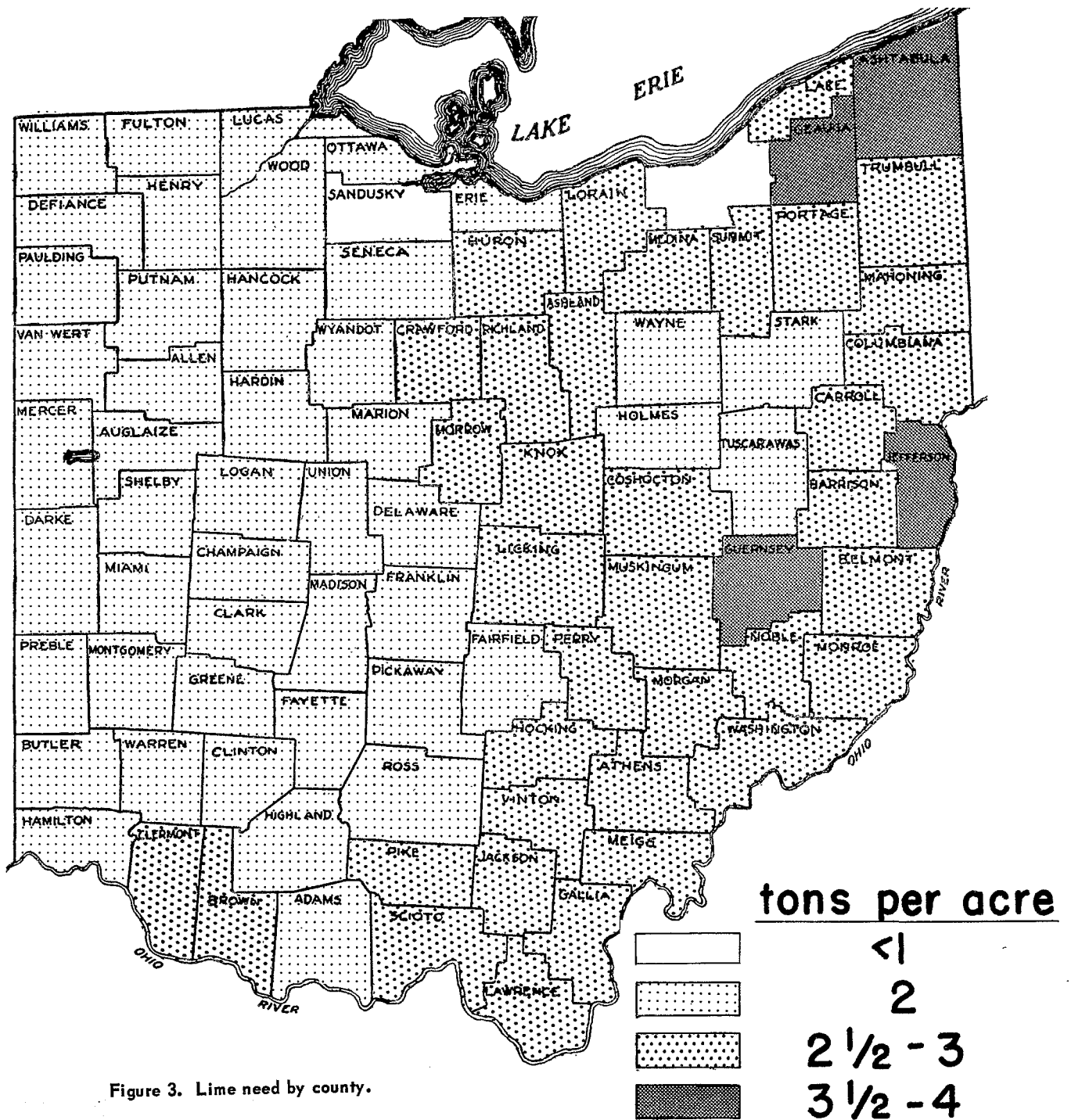


Figure 3. Lime need by county.

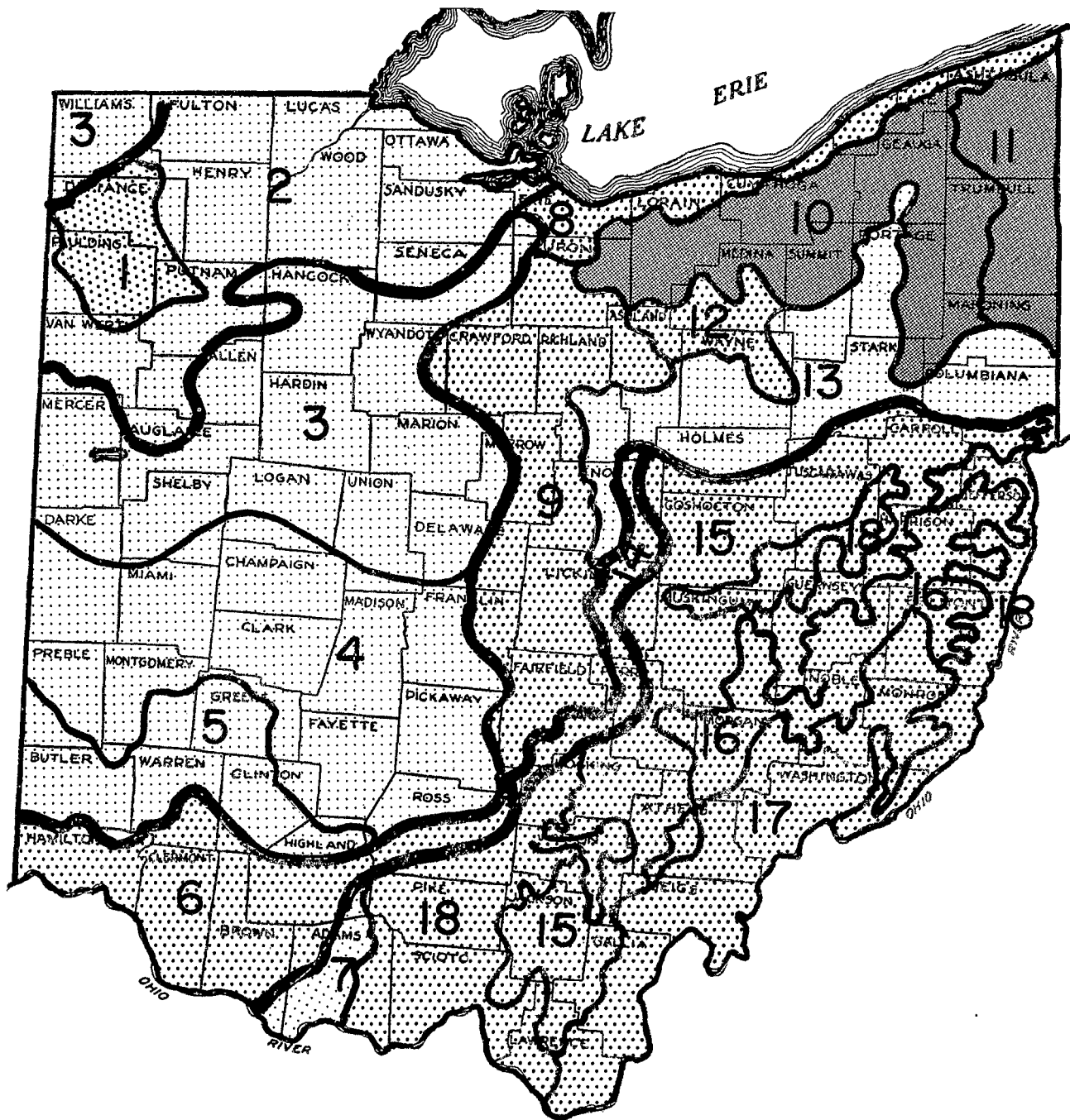


Figure 4. Lime need by soil area.

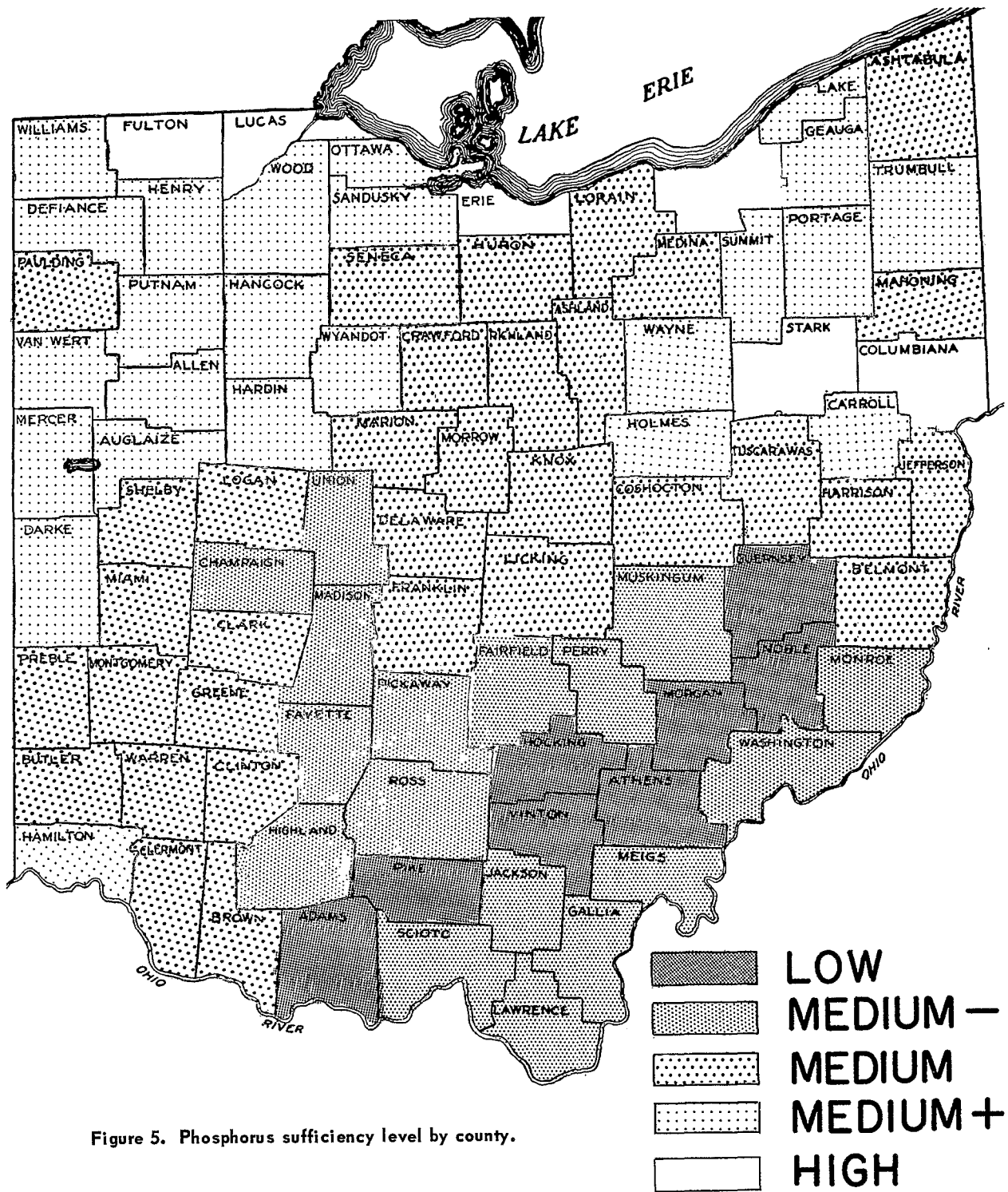


Figure 5. Phosphorus sufficiency level by county.

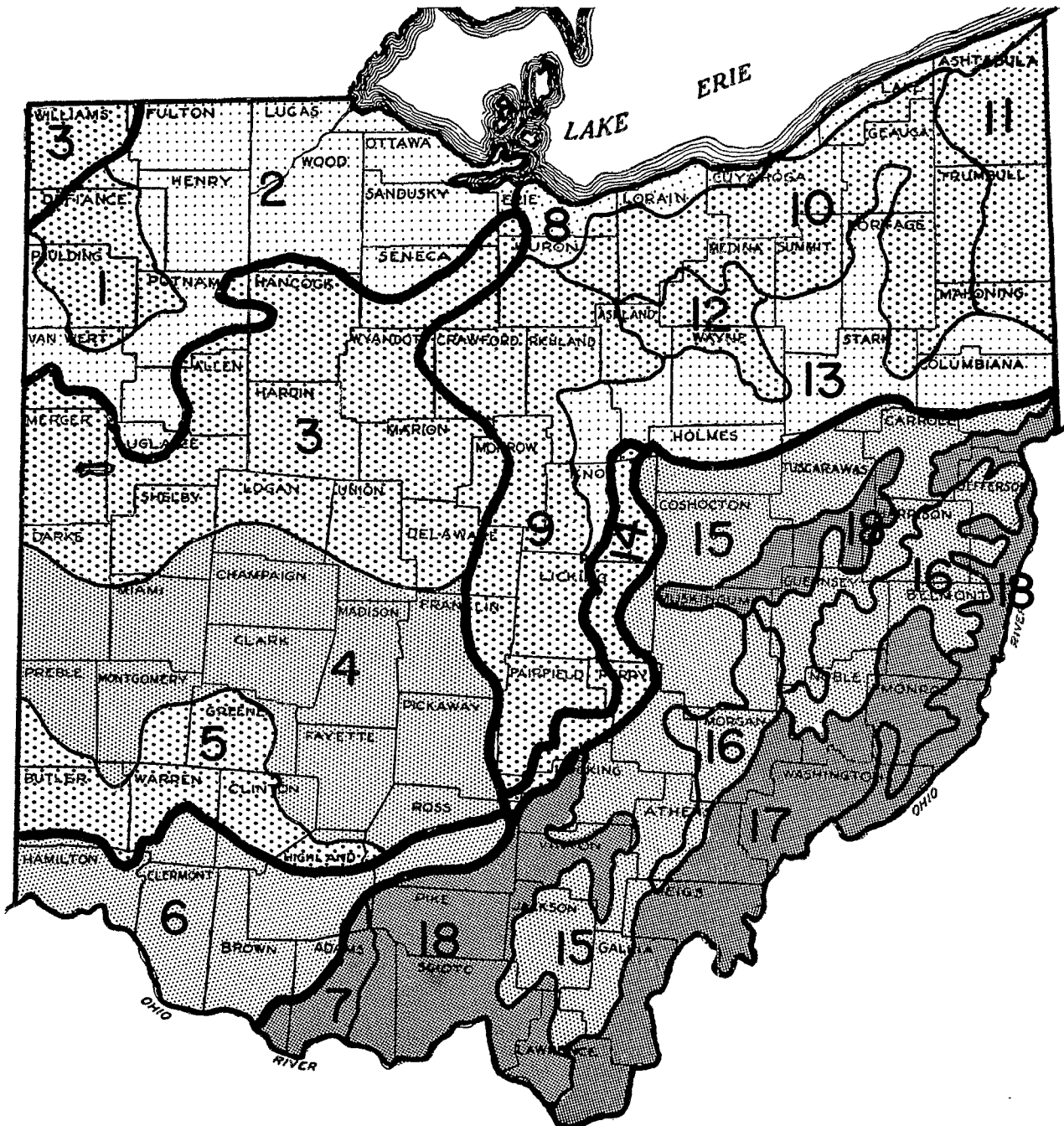


Figure 6. Phosphorus sufficiency level by soil area.

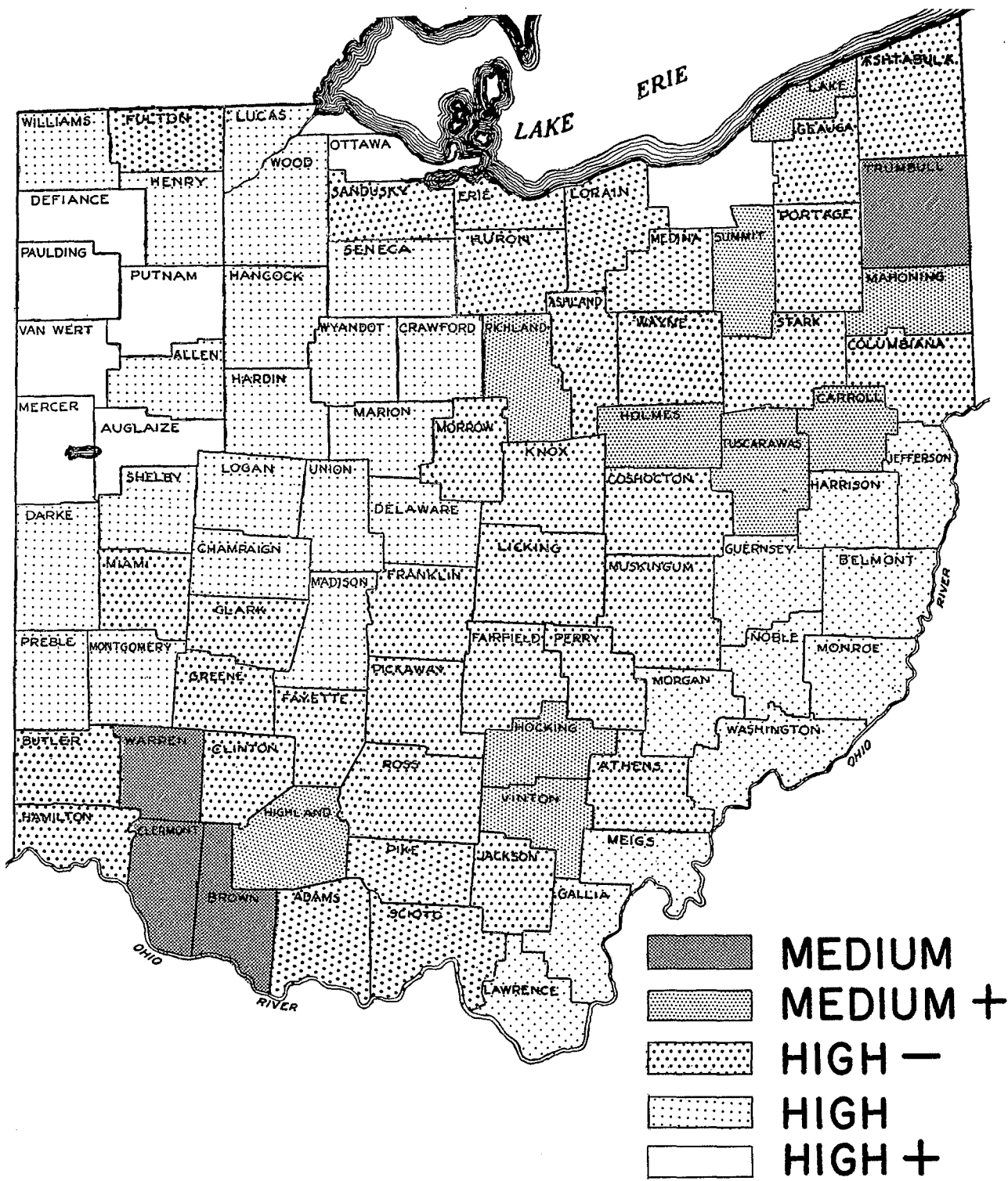


Figure 7. Potassium sufficiency level by county.

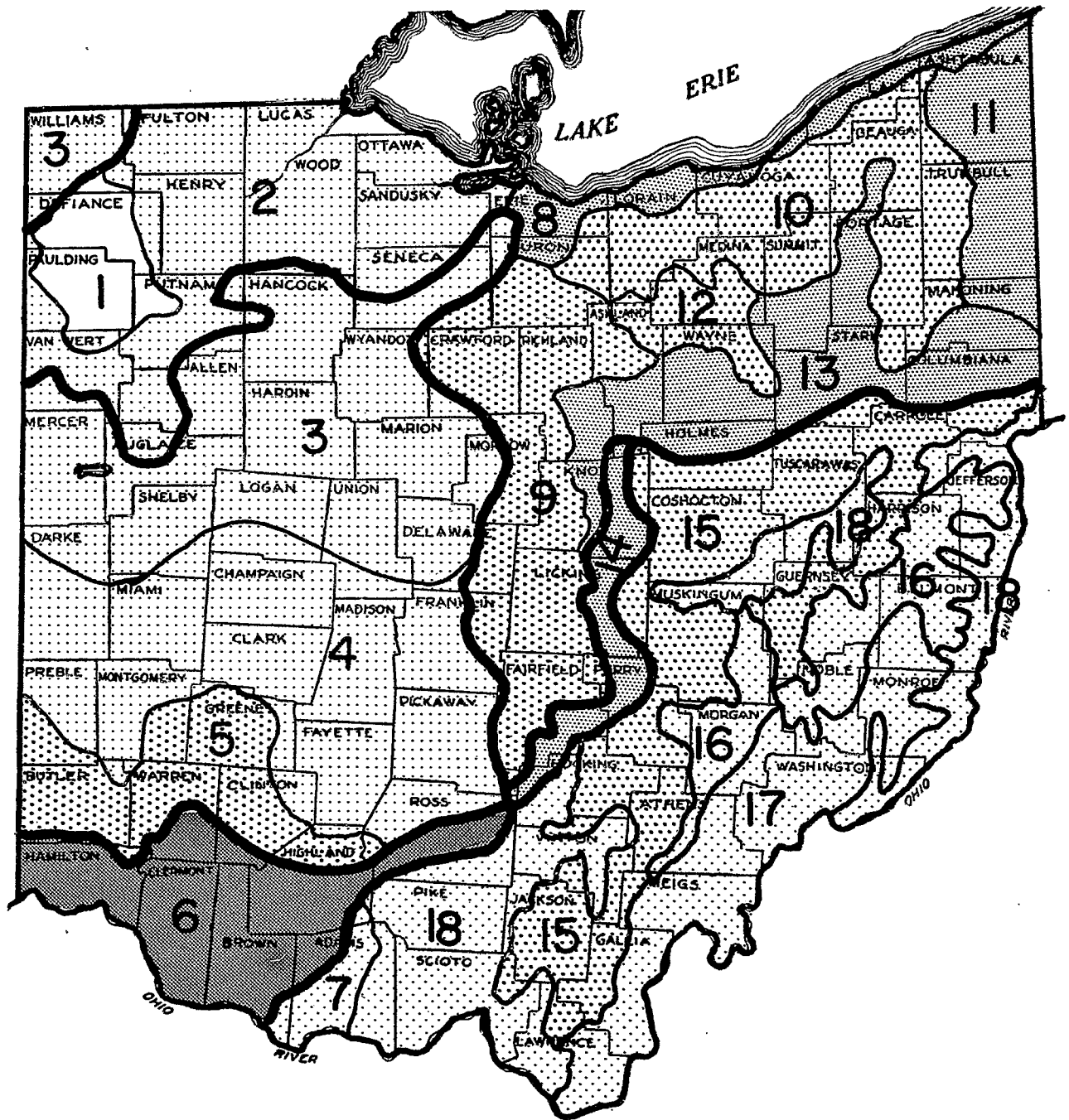


Figure 8. Potassium sufficiency level by soil area.

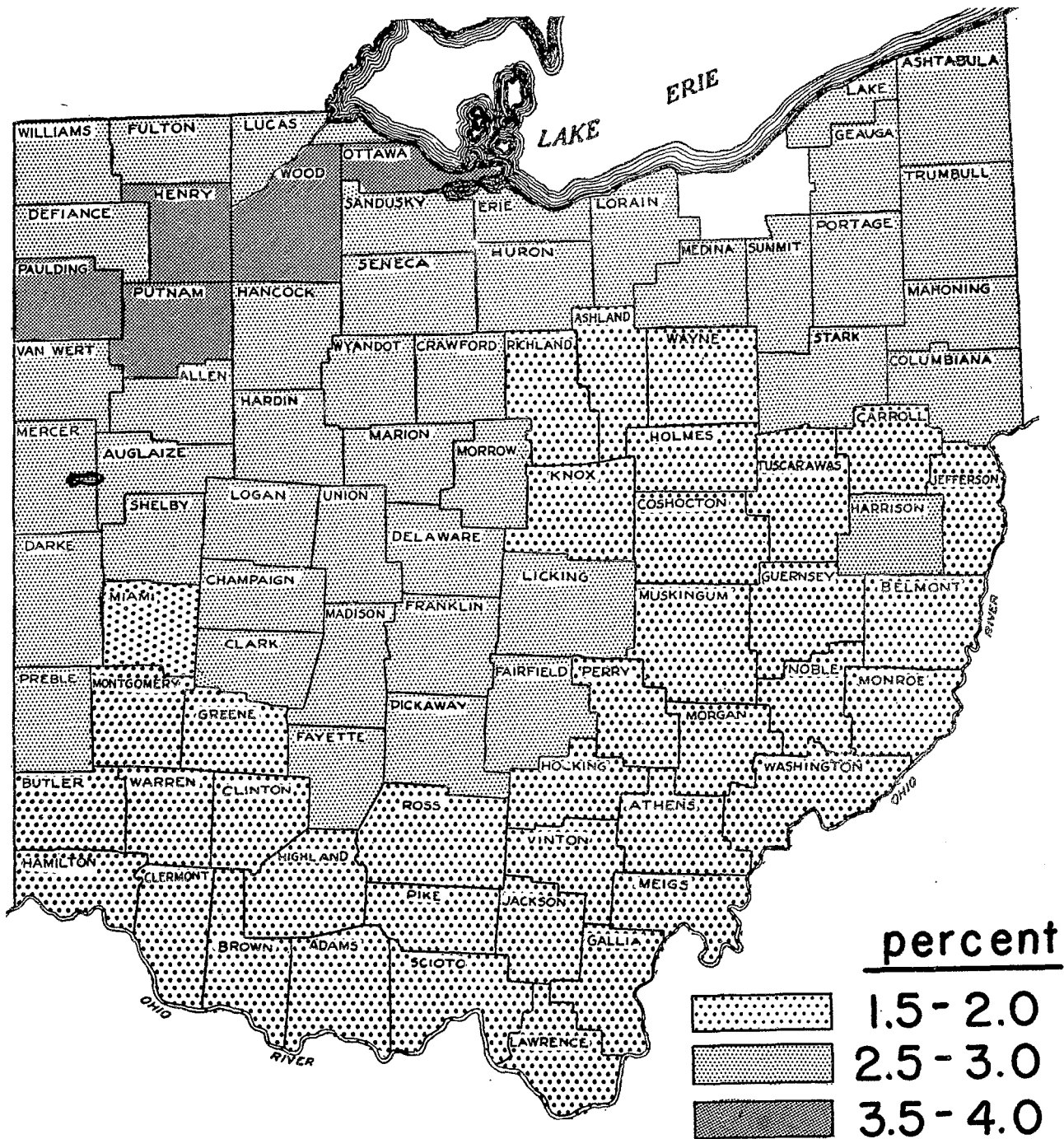


Figure 9. Organic matter content by county.

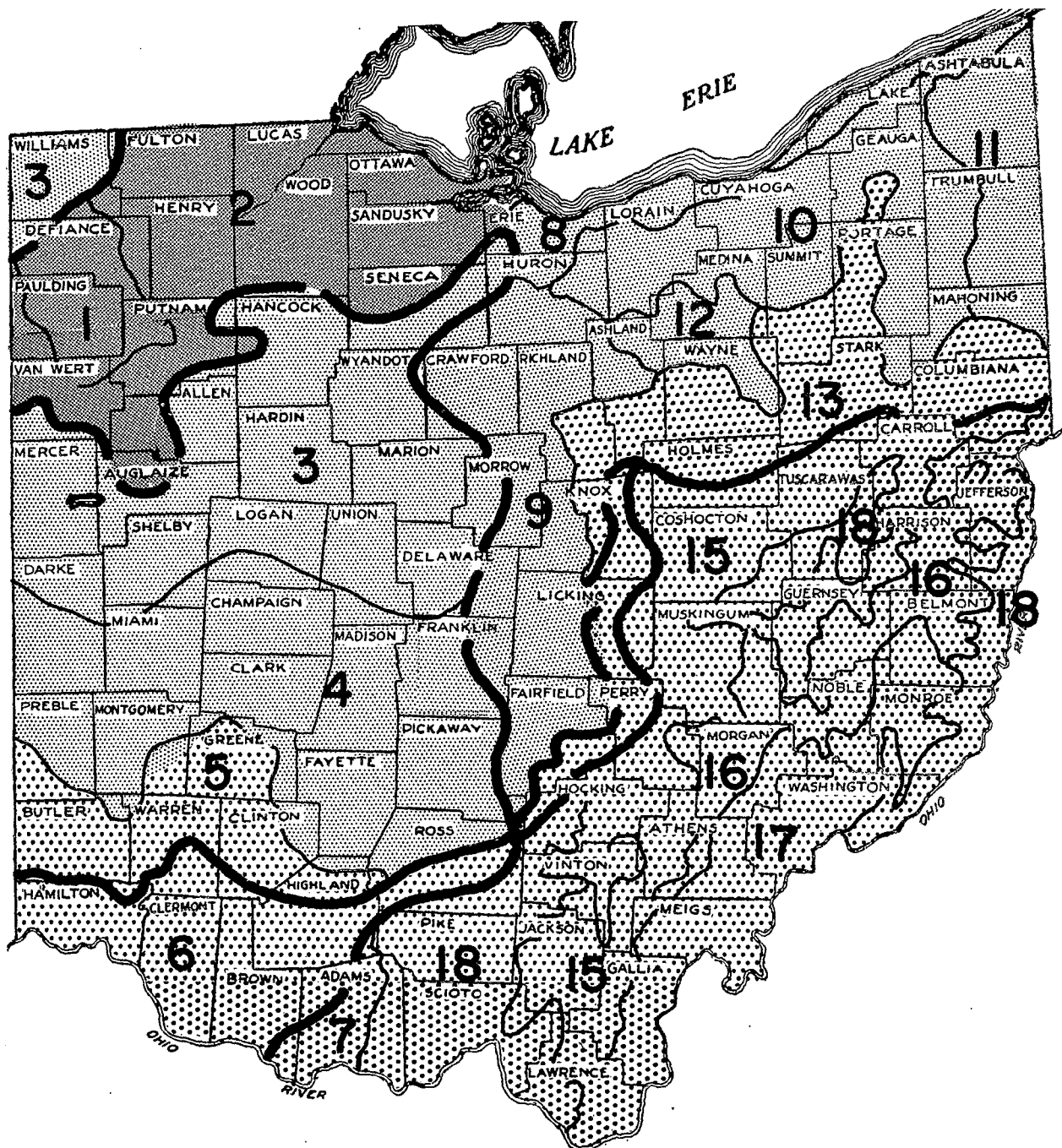


Figure 10. Organic matter content by soil area.

TABLE 2. PERCENT DISTRIBUTION OF SOIL TEST RESULTS BY COUNTY.
ADAMS COUNTY - 1263 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	6	18	29	53
M	3	7	18	28
H	-	1	18	19
TOT. FOR K (READ ACROSS)	9	26	65	100

(B) pH									
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.	
T/A		6.2	5.8	5.4	5.0	4.6	less		
0	19							19	
1-1½		19	8	4				31	
2-2½		1	12	9	4			26	
3-3½				6	10	1		17	
4-4½				1	4			5	
5+					1	1		2	
TOT.	19	20	20	20	19	2		100	

(C)	
% ORGANIC MATTER	
0-1	13
1½-2	75
2½-3	11
3½-4	1
4½-5	0
5+	0
TOT.	100

ALLEN COUNTY - 945 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	1	6	7	14
M	1	12	45	58
H	-	1	27	28
TOT. FOR K (READ ACROSS)	2	19	79	100

(B) pH									
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.	
T/A		6.2	5.8	5.4	5.0	4.6	less		
0	17							17	
1-1½		19	13	2				34	
2-2½		2	17	11	3			33	
3-3½			1	5	6			13	
4-4½						2		2	
5+						1		1	
TOT.	17	21	31	18	9	4		100	

(C)	
% ORGANIC MATTER	
0-1	1
1½-2	29
2½-3	51
3½-4	17
4½-5	2
5+	0
TOT.	100

ASHLAND COUNTY - 1265 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	3	11	7	21
M	4	28	23	55
H	1	5	18	24
TOT. FOR K (READ ACROSS)	8	44	48	100

(B) pH									
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.	
T/A		6.2	5.8	5.4	5.0	4.6	less		
0	13							13	
1-1½		20	4					24	
2-2½		1	15	10	1			27	
3-3½			1	10	13	1		25	
4-4½				1	3	5		9	
5+					1	1		2	
TOT.	13	21	20	21	18	7	0	100	

(C)	
% ORGANIC MATTER	
0-1	10
1½-2	70
2½-3	17
3½-4	2
4½-5	0
5+	1
TOT.	100

ASHTABULA COUNTY - 2129 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT FOR P (READ DOWN)
L	3	10	7	20
M	5	24	26	55
H	1	6	18	25
TOT. FOR K (READ ACROSS)	9	40	51	100

(B) pH									
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.	
T/A		6.2	5.8	5.4	5.0	4.6	less		
0	6							6	
1-1½		9	3					12	
2-2½		5	15	5				25	
3-3½			3	14	7	1		25	
4-4½				2	8	4		14	
5+				1	4	10	3	18	
TOT.	6	14	21	22	19	15	3	100	

(C)	
% ORGANIC MATTER	
0-1	0
1½-2	9
2½-3	59
3½-4	26
4½-5	4
5+	2
TOT.	100

ATHENS COUNTY - 335 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	9	22	25	56
M	1	10	21	32
H	0	1	11	12
TOT. FOR K (READ ACROSS)	10	33	57	100

(B) pH									
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.	
T/A		6.2	5.8	5.4	5.0	4.6	less		
0	26							26	
1-1½		14	7	1				22	
2-2½		1	7	11	2	1		22	
3-3½				6	12	2		20	
4-4½					1	6		7	
5+						2	1	3	
TOT.	26	15	14	18	15	11	1	100	

(C)	
% ORGANIC MATTER	
0-1	16
1½-2	70
2½-3	13
3½-4	1
4½-5	0
5+	0
TOT.	100

AUGLAIZE COUNTY - 2027 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	-	7	8	15
M	1	12	45	58
H	-	1	26	27
TOT. FOR K (READ ACROSS)	1	20	79	100

(B) pH									
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.	
T/A		6.2	5.8	5.4	5.0	4.6	less		
0	16							16	
1-1½		25	11	1				37	
2-2½		2	18	13	1			34	
3-3½				5	6	1		12	
4-4½						1		1	
5+									
TOT.	16	27	29	19	7	2		100	

(C)	
% ORGANIC MATTER	
0-1	1
1½-2	31
2½-3	57
3½-4	9
4½-5	1
5+	1
TOT.	100

BELMONT COUNTY - 904 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	2	11	14	27
M	2	12	33	47
H	1	2	23	26
TOT. FOR K (READ ACROSS)	5	25	70	100

(B)								
LIME	6.6+	6.5	6.0	pH			4.5 or	TOT.
T/A	6.2	5.8	5.4	5.0	4.6	less		
0	11							11
1-1½		15	6					21
2-2½		2	10	10	3			25
3-3½				8	13	4		25
4-4½					2	6		8
5+					1	5	4	10
TOT.	11	17	16	18	19	15	4	100

(C)	
% ORGANIC MATTER	
0-1	4
1½-2	67
2½-3	26
3½-4	3
4½-5	0
5+	0
TOT.	100

BROWN COUNTY - 802 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	15	12	3	30
M	16	14	10	40
H	1	6	23	30
TOT. FOR K (READ ACROSS)	32	32	36	100

(B)								
LIME	6.6+	6.5	6.0	pH			4.5 or	TOT.
T/A	6.2	5.8	5.4	5.0	4.6	less		
0	9							9
1-1½		13	7	3				23
2-2½		1	13	11	6	2		33
3-3½				7	15	4		26
4-4½					1	5	1	7
5+					1	1		2
TOT.	9	14	20	21	22	12	2	100

(C)	
% ORGANIC MATTER	
0-1	14
1½-2	78
2½-3	7
3½-4	1
4½-5	0
5+	0
TOT.	100

BUTLER COUNTY - 630 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	5	10	5	20
M	5	19	18	42
H	1	8	29	38
TOT. FOR K (READ ACROSS)	11	37	52	100

(B)								
LIME	6.6+	6.5	6.0	pH			4.5 or	TOT.
T/A	6.2	5.8	5.4	5.0	4.6	less		
0	31							31
1-1½		25	9	2				36
2-2½		1	15	10	1			27
3-3½				3	3			6
4-4½								-
5+								-
TOT.	31	26	24	15	4	0	0	100

(C)	
% ORGANIC MATTER	
0-1	6
1½-2	66
2½-3	25
3½-4	3
4½-5	0
5+	0
TOT.	100

CARROLL COUNTY - 843 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	4	7	5	16
M	9	19	18	46
H	4	10	24	38
TOT. FOR K (READ ACROSS)	17	36	47	100

(B)								
LIME	6.6+	6.5	6.0	pH			4.5 or	TOT.
T/A	6.2	5.8	5.4	5.0	4.6	less		
0	10							10
1-1½		12	9	1				22
2-2½		1	11	9	3	1		25
3-3½				6	10	3	1	20
4-4½					2	8	2	12
5+					3	8		11
TOT.	10	13	20	16	15	15	11	100

(C)	
% ORGANIC MATTER	
0-1	6
1½-2	77
2½-3	17
3½-4	0
4½-5	0
5+	0
TOT.	100

CHAMPAIGN COUNTY - 1637 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	3	14	16	33
M	2	16	29	47
H	-	3	17	20
TOT. FOR K (READ ACROSS)	5	33	62	100

(B)								
LIME	6.6+	6.5	6.0	pH			4.5 or	TOT.
T/A	6.2	5.8	5.4	5.0	4.6	less		
0	25							25
1-1½		22	12	1				35
2-2½		2	16	9	1			28
3-3½			1	5	4			10
4-4½					1	1		2
5+								-
TOT.	25	24	29	15	6	1	0	100

(C)	
% ORGANIC MATTER	
0-1	2
1½-2	48
2½-3	33
3½-4	9
4½-5	3
5+	5
TOT.	100

CLARK COUNTY - 1459 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	4	15	8	27
M	3	19	26	48
H	-	4	21	25
TOT. FOR K (READ ACROSS)	7	38	55	100

(B)								
LIME	6.6+	6.5	6.0	pH			4.5 or	TOT.
T/A	6.2	5.8	5.4	5.0	4.6	less		
0	33							33
1-1½		19	11	2				32
2-2½		2	13	9	1			25
3-3½			1	4	3			8
4-4½						2		2
5+								-
TOT.	33	21	25	15	4	2	0	100

(C)	
% ORGANIC MATTER	
0-1	3
1½-2	52
2½-3	31
3½-4	8
4½-5	2
5+	4
TOT.	100

CLERMONT COUNTY - 601 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	20	12	2	34
M	16	14	9	39
H	2	6	19	27
TOT. FOR K (READ ACROSS)	38	32	30	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	19							19
1-1½		15	5	1				21
2-2½		1	12	9	3			25
3-3½				8	14	2		24
4-4½						7		9
5+						1	1	2
TOT.	19	16	17	18	19	10	1	100

(C)	
% ORGANIC MATTER	
0-1	17
1½-2	72
2½-3	11
3½-4	0
4½-5	0
5+	0
TOT.	100

CLINTON COUNTY - 3322 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	5	11	5	21
M	7	25	25	57
H	-	4	18	22
TOT. FOR K (READ ACROSS)	12	40	48	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	25							25
1-1½		26	15	4				45
2-2½		1	10	8	3			22
3-3½				3	4			7
4-4½						1		1
5+								0
TOT.	25	27	25	15	7	1	0	100

(C)	
% ORGANIC MATTER	
0-1	6
1½-2	61
2½-3	25
3½-4	7
4½-5	1
5+	0
TOT.	100

COLUMBIANA COUNTY - 682 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	1	2	2	5
M	6	20	15	41
H	3	12	39	54
TOT. FOR K (READ ACROSS)	10	34	56	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	16							16
1-1½		22	7	9	2			29
2-2½		3	14	5	10	2		28
3-3½						2		17
4-4½						2		4
5+						1	2	3
TOT.	16	25	21	14	15	6	3	100

(C)	
% ORGANIC MATTER	
0-1	1
1½-2	59
2½-3	37
3½-4	3
4½-5	-
5+	-
TOT.	100

COSHOCTON COUNTY - 1376 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	5	11	11	27
M	5	16	23	44
H	3	8	18	29
TOT. FOR K (READ ACROSS)	13	35	52	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	14							14
1-1½		17	5	1				23
2-2½		1	13	9	2			25
3-3½				8	14	2		24
4-4½						1	9	11
5+						2	1	3
TOT.	14	18	18	18	17	13	2	100

(C)	
% ORGANIC MATTER	
0-1	12
1½-2	75
2½-3	13
3½-4	0
4½-5	0
5+	0
TOT.	100

CRAWFORD COUNTY - 987 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	2	10	6	18
M	2	18	39	59
H	-	2	21	23
TOT. FOR K (READ ACROSS)	4	30	66	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	17							17
1-1½		19	6					25
2-2½		4	15	12				31
3-3½			2	9	7			18
4-4½				1	2	2		5
5+					2	1	1	4
TOT.	17	23	23	22	11	3	1	100

(C)	
% ORGANIC MATTER	
0-1	2
1½-2	34
2½-3	47
3½-4	12
4½-5	3
5+	2
TOT.	100

DARKE COUNTY - 1880 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	1	7	10	18
M	-	9	42	51
H	-	1	30	31
TOT. FOR K (READ ACROSS)	1	17	82	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	27							27
1-1½		25	9	1				35
2-2½		3	18	8	1			30
3-3½				4	3			7
4-4½						1		1
5+								0
TOT.	27	28	27	13	4	1	0	100

(C)	
% ORGANIC MATTER	
0-1	1
1½-2	38
2½-3	46
3½-4	12
4½-5	1
5+	2
TOT.	100

DEFLANCE COUNTY - 447 SAMPLES

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	1	2	12	15	
M	2	6	47	55	
H	-	3	27	30	
TOT. FOR K (READ ACROSS)	3	11	86	100	

(B)	pH								
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6			
0	20								20
1-1½		19	11	1					31
2-2½		5	16	7	2				30
3-3½			2	7	4				13
4-4½				1	1	1			3
5+					2	1			3
TOT.	20	24	29	16	9	2	0		100

(C)	% ORGANIC MATTER	
0-1	-----	1
1½-2	-----	20
2½-3	-----	39
3½-4	-----	34
4½-5	-----	5
5+	-----	1
TOT.		100

DELAWARE COUNTY - 1371 SAMPLES

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	4	13	11	28	
M	1	15	37	53	
H	-	2	17	19	
TOT. FOR K (READ ACROSS)	5	30	65	100	

(B)	pH								
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6			
0	19								19
1-1½		21	6	2					29
2-2½		2	14	11	1				28
3-3½			2	7	8	1			18
4-4½					1	2			3
5+					1	1	1		3
TOT.	19	23	22	20	11	4	1		100

(C)	% ORGANIC MATTER	
0-1	-----	1
1½-2	-----	38
2½-3	-----	44
3½-4	-----	13
4½-5	-----	3
5+	-----	1
TOT.		100

ERIE COUNTY - 273 SAMPLES

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	1	3	6	10	
M	6	11	18	35	
H	6	14	35	55	
TOT. FOR K (READ ACROSS)	13	28	59	100	

(B)	pH								
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6			
0	36								36
1-1½		27	9						36
2-2½		3	6	5	2				16
3-3½		1	3	3	2				9
4-4½				1	1				2
5+						1			1
TOT.	36	31	18	9	5	1			100

(C)	% ORGANIC MATTER	
0-1	-----	4
1½-2	-----	30
2½-3	-----	36
3½-4	-----	14
4½-5	-----	8
5+	-----	8
TOT.		100

FAIRFIELD COUNTY - 918 SAMPLES

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	7	16	7	30	
M	4	25	23	52	
H	-	2	16	18	
TOT. FOR K (READ ACROSS)	11	43	46	100	

(B)	pH								
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6			
0	17								17
1-1½		16	11	3					30
2-2½		1	13	10	5				29
3-3½			1	7	9	2			19
4-4½					1	4			5
5+									0
TOT.	17	17	25	20	15	6	0		100

(C)	% ORGANIC MATTER	
0-1	-----	4
1½-2	-----	54
2½-3	-----	34
3½-4	-----	5
4½-5	-----	1
5+	-----	2
TOT.		100

FAYETTE COUNTY - 2936 SAMPLES

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	4	18	10	32	
M	2	22	29	53	
H	0	2	13	15	
TOT. FOR K (READ ACROSS)	6	42	52	100	

(B)	pH								
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6			
0	30								30
1-1½		24	11	2					37
2-2½		2	13	8	2				25
3-3½				4	3				7
4-4½						1			1
5+									0
TOT.	30	26	24	14	5	1	0		100

(C)	% ORGANIC MATTER	
0-1	-----	2
1½-2	-----	43
2½-3	-----	36
3½-4	-----	14
4½-5	-----	4
5+	-----	1
TOT.		100

FRANKLIN COUNTY - 2101 SAMPLES

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	3	15	8	26	
M	2	16	34	52	
H	1	3	18	22	
TOT. FOR K (READ ACROSS)	6	34	60	100	

(B)	pH								
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6			
0	28								28
1-1½		21	9						30
2-2½		3	14	10	2				29
3-3½			1	4	4	1			10
4-4½					1	2			3
5+									0
TOT.	28	24	24	14	7	3	0		100

(C)	% ORGANIC MATTER	
0-1	-----	2
1½-2	-----	42
2½-3	-----	43
3½-4	-----	11
4½-5	-----	1
5+	-----	1
TOT.		100

FULTON COUNTY - 1479 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	1	2	2	5
M	7	12	21	40
H	6	13	36	55
TOT. FOR K (READ ACROSS)	14	27	59	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	24							24
1-1½		29	21	4	1			55
2-2½		2	8	6	1			17
3-3½				1	2	1		4
4-4½								0
5+								0
TOT.	24	31	29	11	4	1	0	100

(C)	
% ORGANIC MATTER	
0-1	4
1½-2	20
2½-3	44
3½-4	24
4½-5	5
5+	3
TOT.	100

GALLIA COUNTY - 651 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	4	15	27	46
M	3	8	22	33
H	1	3	17	21
TOT. FOR K (READ ACROSS)	8	26	66	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	18							18
1-1½		15	7					22
2-2½			9	8	4	1		22
3-3½				8	14	3		25
4-4½					2	7		9
5+						2	2	4
TOT.	18	15	16	16	20	13	2	100

(C)	
% ORGANIC MATTER	
0-1	16
1½-2	62
2½-3	20
3½-4	2
4½-5	0
5+	0
TOT.	100

GEAUGA COUNTY - 647 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	2	9	5	16
M	4	22	25	51
H	2	8	23	33
TOT. FOR K (READ ACROSS)	8	39	53	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	4							4
1-1½		11	4					15
2-2½		6	14	5	1			26
3-3½		1	5	13	7	1		27
4-4½				3	8	1		12
5+				1	6	6	3	16
TOT.	4	18	23	22	22	8	3	100

(C)	
% ORGANIC MATTER	
0-1	-
1½-2	13
2½-3	74
3½-4	12
4½-5	1
5+	-
TOT.	100

GREENE COUNTY - 915 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	7	9	5	21
M	5	26	22	53
H	-	4	22	26
TOT. FOR K (READ ACROSS)	12	39	49	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	16							16
1-1½		21	15	6	1			43
2-2½			12	12	5			29
3-3½				5	5	1		11
4-4½						1		1
5+								0
TOT.	16	21	27	23	11	2	0	100

(C)	
% ORGANIC MATTER	
0-1	6
1½-2	64
2½-3	21
3½-4	7
4½-5	2
5+	-
TOT.	100

GUERNSEY COUNTY - 1447 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	4	15	27	46
M	2	11	31	44
H	-	1	9	10
TOT. FOR K (READ ACROSS)	6	27	67	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	5							5
1-1½		11	4	1				16
2-2½		1	11	10	4	1		27
3-3½				10	15	5		30
4-4½					3	10	1	14
5+						5	3	8
TOT.	5	12	15	21	22	21	4	100

(C)	
% ORGANIC MATTER	
0-1	19
1½-2	67
2½-3	13
3½-4	1
4½-5	-
5+	-
TOT.	100

HAMILTON COUNTY - 230 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	5	10	3	18
M	4	14	14	32
H	2	11	37	50
TOT. FOR K (READ ACROSS)	11	35	54	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	40							40
1-1½		17	4	2				23
2-2½			7	5	3	1		16
3-3½				7	10	4		21
4-4½								0
5+								0
TOT.	40	17	11	14	13	5	0	100

(C)	
% ORGANIC MATTER	
0-1	13
1½-2	69
2½-3	15
3½-4	2
4½-5	1
5+	-
TOT.	100

HANCOCK COUNTY - 2348 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	1	4	4	9
M	1	14	46	61
H	-	2	28	30
TOT. FOR K (READ ACROSS)	2	20	78	100

(B)								
LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	18							18
1-1½		22	10	1				33
2-2½		3	17	10	2			32
3-3½			1	7	7			15
4-4½						2		2
5+								0
TOT.	18	25	28	18	9	2	0	100

(C)	
% ORGANIC MATTER	
0-1	-----
1½-2	----- 29
2½-3	----- 50
3½-4	----- 17
4½-5	----- 3
5+	----- 1
TOT.	100

HARDIN COUNTY - 920 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	1	6	6	13
M	1	14	44	59
H	-	1	27	28
TOT. FOR K (READ ACROSS)	2	21	77	100

(B)								
LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	21							21
1-1½		25	9					34
2-2½		3	14	10	2			29
3-3½			2	5	4	1		12
4-4½						1		1
5+				1	1		1	3
TOT.	21	28	25	16	7	2	1	100

(C)	
% ORGANIC MATTER	
0-1	-----
1½-2	----- 29
2½-3	----- 47
3½-4	----- 16
4½-5	----- 3
5+	----- 5
TOT.	100

HARRISON COUNTY - 344 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	2	10	13	25
M	3	13	35	51
H	1	7	16	24
TOT. FOR K (READ ACROSS)	6	30	64	100

(B)								
LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	19							19
1-1½		15	10					25
2-2½		1	11	8	3			23
3-3½				5	8			16
4-4½					2	5	1	8
5+						5	4	9
TOT.	19	16	21	13	13	13	5	100

(C)	
% ORGANIC MATTER	
0-1	----- 3
1½-2	----- 51
2½-3	----- 38
3½-4	----- 8
4½-5	----- --
5+	----- --
TOT.	100

HENRY COUNTY - 1094 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	1	1	9	11
M	3	5	46	54
H	2	5	28	35
TOT. FOR K (READ ACROSS)	6	11	83	100

(B)								
LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	20							20
1-1½		32	17	2	1			52
2-2½		4	16	5	1			26
3-3½				1	1			2
4-4½								-
5+								-
TOT.	20	36	33	8	3	0	0	100

(C)	
% ORGANIC MATTER	
0-1	----- 2
1½-2	----- 9
2½-3	----- 35
3½-4	----- 40
4½-5	----- 10
5+	----- 4
TOT.	100

HIGHLAND COUNTY - 1351 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	14	18	12	44
M	9	20	15	44
H	1	2	9	12
TOT. FOR K (READ ACROSS)	24	40	36	100

(B)								
LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	22							22
1-1½		24	9	3	1			37
2-2½			11	10	3	1		25
3-3½				5	7	2		14
4-4½						1	1	2
5+								0
TOT.	22	24	20	18	11	4	1	100

(C)	
% ORGANIC MATTER	
0-1	----- 15
1½-2	----- 75
2½-3	----- 9
3½-4	----- 1
4½-5	----- -
5+	----- -
TOT.	100

HOCKING COUNTY - 330 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	11	24	23	58
M	5	14	11	30
H	-	3	9	12
TOT. FOR K (READ ACROSS)	16	41	43	100

(B)								
LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	17							17
1-1½		12	8	5				25
2-2½			8	9	9	1		27
3-3½				3	12	6		21
4-4½						8		8
5+						1	1	2
TOT.	17	12	16	17	21	16	1	100

(C)	
% ORGANIC MATTER	
0-1	----- 22
1½-2	----- 69
2½-3	----- 8
3½-4	----- 1
4½-5	----- -
5+	----- -
TOT.	100

HOLMES COUNTY - 667 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	3	6	4	13
M	10	22	21	53
H	2	10	22	34
TOT. FOR K (READ ACROSS)	15	38	47	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	23							23
1-1½		20	7	1				28
2-2½		1	13	9	3			26
3-3½			1	6	8	1		16
4-4½						6		6
5+							1	1
TOT.	23	21	21	16	11	7	1	100

(C)	
% ORGANIC MATTER	
0-1	6
1½-2	79
2½-3	14
3½-4	1
4½-5	-
5+	-
TOT.	100

HURON COUNTY - 979 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	4	10	6	20
M	5	23	27	55
H	1	5	19	25
TOT. FOR P (READ ACROSS)	10	38	52	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	17							17
1-1½		19	6	1				26
2-2½		2	12	7	3			24
3-3½			1	9	5	1		16
4-4½			1	1	3	3		8
5+				1	2	4	2	9
TOT.	17	21	20	19	13	8	2	100

(C)	
% ORGANIC MATTER	
0-1	3
1½-2	41
2½-3	40
3½-4	7
4½-5	4
5+	5
TOT.	100

JACKSON COUNTY - 423 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	5	16	25	46
M	8	14	18	40
H	-	3	11	14
TOT. FOR K (READ ACROSS)	13	33	54	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	13							13
1-1½		16	12	2	1			31
2-2½			9	6	4			19
3-3½				7	19	2		28
4-4½						7		7
5+							2	2
TOT.	13	16	21	15	24	9	2	100

(C)	
% ORGANIC MATTER	
0-1	12
1½-2	71
2½-3	16
3½-4	1
4½-5	-
5+	-
TOT.	100

JEFFERSON COUNTY - 799 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	2	8	14	24
M	4	13	31	48
H	1	5	22	28
TOT. FOR K (READ ACROSS)	7	26	67	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	8							8
1-1½		11	5	1				17
2-2½		1	9	9	5			24
3-3½			1	8	12	5		26
4-4½					2	8	1	11
5+					1	5	8	14
TOT.	8	12	15	18	20	18	9	100

(C)	
% ORGANIC MATTER	
0-1	4
1½-2	67
2½-3	25
3½-4	2
4½-5	1
5+	1
TOT.	100

KNOX COUNTY - 1907 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	5	8	5	18
M	7	20	26	53
H	2	5	22	29
TOT. FOR K (READ ACROSS)	14	33	53	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	9							9
1-1½		12	8	1				21
2-2½		1	12	14	3			30
3-3½			1	8	16	3		28
4-4½				1	1	6	1	9
5+						1	2	3
TOT.	9	13	21	24	20	10	3	100

(C)	
% ORGANIC MATTER	
0-1	5
1½-2	69
2½-3	23
3½-4	2
4½-5	1
5+	-
TOT.	100

LAKE COUNTY - 116 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	5	6	6	17
M	11	15	18	44
H	4	12	23	39
TOT. FOR K (READ ACROSS)	20	33	47	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.2	5.8	5.4	5.0	4.6			
0	11							11
1-1½		13	8	5				26
2-2½		2	3	5	10	3		23
3-3½			2	7	6	1		16
4-4½				2	3	6		11
5+					3	6	4	13
TOT.	11	15	13	19	22	16	4	100

(C)	
% ORGANIC MATTER	
0-1	-
1½-2	36
2½-3	51
3½-4	11
4½-5	1
5+	1
TOT.	100

LAWRENCE COUNTY - 501 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	4	16	30	50
M	2	8	20	30
H	-	2	18	20
TOT. FOR K (READ ACROSS)				100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	20							20
1-1½		12	6	1				19
2-2½			11	9	5			25
3-3½				6	12	4		22
4-4½					1	5		6
5+					1	5	2	8
TOT.								100

(C)	% ORGANIC MATTER	
0-1	-----	10
1½-2	-----	61
2½-3	-----	27
3½-4	-----	2
4½-5	-----	-
5+	-----	-
TOT.		100

LICKING COUNTY - 912 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	6	8	6	20
M	5	21	23	49
H	1	5	25	31
TOT. FOR K (READ ACROSS)				100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	13							13
1-1½		16	6	2				24
2-2½		2	15	11	4			32
3-3½			1	10	10	1		22
4-4½				1	1	5	1	8
5+						1	1	2
TOT.								100

(C)	% ORGANIC MATTER	
0-1	-----	5
1½-2	-----	55
2½-3	-----	32
3½-4	-----	6
4½-5	-----	1
5+	-----	1
TOT.		100

LOGAN COUNTY - 1153 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	1	10	16	27
M	1	12	38	51
H	-	2	20	22
TOT. FOR K (READ ACROSS)				100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	29							29
1-1½		25	9	2				36
2-2½		3	15	7	1			26
3-3½			1	4	3			8
4-4½						1		1
5+								0
TOT.								100

(C)	% ORGANIC MATTER	
0-1	-----	1
1½-2	-----	37
2½-3	-----	41
3½-4	-----	12
4½-5	-----	3
5+	-----	6
TOT.		100

LORAIN COUNTY - 550 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	4	13	6	23
M	3	23	31	57
H	-	3	17	20
TOT. FOR K (READ ACROSS)				100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	10							10
1-1½		15	6	1				22
2-2½		1	11	11	4			27
3-3½			1	7	14	4		26
4-4½					4	4		8
5+						5	2	7
TOT.								100

(C)	% ORGANIC MATTER	
0-1	-----	1
1½-2	-----	40
2½-3	-----	55
3½-4	-----	3
4½-5	-----	1
5+	-----	-
TOT.		100

LUCAS COUNTY - 524 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	2	1	4	7
M	2	5	29	36
H	6	10	41	57
TOT. FOR K (READ ACROSS)				100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	20							20
1-1½		32	15	2				49
2-2½		2	14	7	4			27
3-3½				2	1			3
4-4½						1		1
5+								0
TOT.								100

(C)	% ORGANIC MATTER	
0-1	-----	2
1½-2	-----	13
2½-3	-----	48
3½-4	-----	29
4½-5	-----	6
5+	-----	2
TOT.		100

MADISON COUNTY - 2951 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	2	16	18	36
M	1	12	36	49
H	-	2	13	15
TOT. FOR K (READ ACROSS)				100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	30							30
1-1½		25	10	1				36
2-2½		2	13	8	1			24
3-3½			1	5	3			9
4-4½						1		1
5+								0
TOT.								100

(C)	% ORGANIC MATTER	
0-1	-----	2
1½-2	-----	37
2½-3	-----	34
3½-4	-----	20
4½-5	-----	5
5+	-----	2
TOT.		100

MAHONING COUNTY - 325 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	3	7	3	13
M	14	20	15	49
H	4	9	25	38
TOT. FOR K (READ ACROSS)				100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	14							14
1-1½		18	10					28
2-2½			10	7	3			20
3-3½			2	8	8	2		20
4-4½					3	3	1	7
5+						5	6	11
TOT.								100

(C)	% ORGANIC MATTER	
0-1	-----	1
1½-2	-----	39
2½-3	-----	50
3½-4	-----	9
4½-5	-----	1
5+	-----	0
TOT.		100

MARION COUNTY - 1471 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	1	6	9	16
M	1	13	49	63
H	-	1	20	21
TOT. FOR K (READ ACROSS)	2	20	78	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	16							16
1-1½		22	6					28
2-2½		3	19	12	1			35
3-3½			2	9	6			17
4-4½				1	1			2
5+					1	1		2
TOT.	16	25	27	22	9	1	0	100

(C)	
% ORGANIC MATTER	
0-1	1
1½-2	21
2½-3	51
3½-4	21
4½-5	5
5+	1
TOT.	100

MEDINA COUNTY - 1033 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	5	10	5	20
M	7	21	24	52
H	2	6	20	28
TOT. FOR K (READ ACROSS)	14	37	49	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	15							15
1-1½		15	6	1				22
2-2½		3	13	9	2			27
3-3½			1	9	10	1		21
4-4½				1	3	3		7
5+					1	3	4	8
TOT.	15	18	20	20	16	7	4	100

(C)	
% ORGANIC MATTER	
0-1	2
1½-2	46
2½-3	48
3½-4	3
4½-5	.5
5+	.5
TOT.	100.0

MEIGS COUNTY - 599 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	2	16	24	42
M	4	9	25	38
H	1	2	17	20
TOT. FOR K (READ ACROSS)	7	27	66	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	18							18
1-1½		17	5	1	1			24
2-2½		1	9	10	3			23
3-3½				7	14	4		25
4-4½					1	5		6
5+						2	2	4
TOT.	18	18	14	18	19	11	2	100

(C)	
% ORGANIC MATTER	
0-1	10
1½-2	72
2½-3	16
3½-4	2
4½-5	0
5+	0
TOT.	100

MERCER COUNTY - 1322 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	-	6	7	13
M	-	11	50	61
H	-	1	25	26
TOT. FOR K (READ ACROSS)	-	18	82	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	19							19
1-1½		25	9	1				35
2-2½		3	18	12	1			34
3-3½			1	5	3			9
4-4½					1	1		2
5+						1		1
TOT.	19	28	28	18	5	2	0	100

(C)	
% ORGANIC MATTER	
0-1	1
1½-2	29
2½-3	54
3½-4	13
4½-5	2
5+	1
TOT.	100

MIAMI COUNTY - 1896 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	2	12	10	24
M	1	16	35	52
H	-	2	22	24
TOT. FOR K (READ ACROSS)	3	30	67	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	26							26
1-1½		26	10	1				37
2-2½		2	18	9				29
3-3½				4	3			7
4-4½						1		1
5+								0
TOT.	26	28	28	14	3	1	0	100

(C)	
% ORGANIC MATTER	
0-1	1
1½-2	47
2½-3	41
3½-4	9
4½-5	1
5+	1
TOT.	100

MONROE COUNTY - 1353 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	4	13	23	40
M	1	10	32	43
H	-	2	15	17
TOT. FOR K (READ ACROSS)	5	25	70	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	13							13
1-1½		15	8	1				24
2-2½		2	13	10	2			27
3-3½				7	11	2		20
4-4½					2	7	1	10
5+						4	2	6
TOT.	13	17	21	18	15	13	3	100

(C)	
% ORGANIC MATTER	
0-1	9
1½-2	69
2½-3	20
3½-4	1
4½-5	1
5+	0
TOT.	100

MONTGOMERY COUNTY - 1699 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	2	11	12	25
M	1	16	37	54
H	-	2	19	21
TOT. FOR K (READ ACROSS)	3	29	68	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6		
0	27							27
1-1½		26	14	4				44
2-2½		2	11	8	2			23
3-3½				4	2			6
4-4½								0
5+								0
TOT.	27	28	25	16	4	0	0	100

(C)	
% ORGANIC MATTER	
0-1	2
1½-2	58
2½-3	34
3½-4	5
4½-5	1
5+	0
TOT.	100

MORGAN COUNTY - 1041 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	3	15	30	48
M	2	7	28	37
H	1	1	13	15
TOT. FOR K (READ ACROSS)	6	23	71	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6		
0	17							17
1-1½		14	8	1				23
2-2½			12	7	4	1		24
3-3½				6	13	1		20
4-4½					1	9	1	11
5+						2	3	5
TOT.	17	14	20	14	18	13	4	100

(C)	
% ORGANIC MATTER	
0-1	12
1½-2	72
2½-3	15
3½-4	1
4½-5	0
5+	0
TOT.	100

MORROW COUNTY - 1226 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	2	13	7	22
M	3	20	40	63
H	0	2	13	15
TOT. FOR K (READ ACROSS)	5	35	60	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6		
0	12							12
1-1½		18	6	1				25
2-2½		2	17	10	2			31
3-3½			1	9	16	1		27
4-4½					2	2		4
5+							1	1
TOT.	12	20	24	20	20	3	1	100

(C)	
% ORGANIC MATTER	
0-1	1
1½-2	42
2½-3	48
3½-4	7
4½-5	1
5+	1
TOT.	100

MUSKINGUM COUNTY - 692 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	7	14	20	41
M	3	13	27	43
H	-	3	13	16
TOT. FOR K (READ ACROSS)	10	30	60	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6		
0	13							13
1-1½		16	6	2				24
2-2½			13	8	4			25
3-3½				5	13	2		20
4-4½					2	10	1	13
5+						3	2	5
TOT.	13	16	19	15	19	15	3	100

(C)	
% ORGANIC MATTER	
0-1	16
1½-2	71
2½-3	11
3½-4	2
4½-5	0
5+	0
TOT.	100

NOBLE COUNTY - 850 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	4	16	34	54
M	1	7	28	36
H	0	2	8	10
TOT. FOR K (READ ACROSS)	5	25	70	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6		
0	10							10
1-1½		14	9	2				25
2-2½		1	12	10	5			28
3-3½				7	13	3		23
4-4½					1	7	1	9
5+						2	3	5
TOT.	10	15	21	19	19	12	4	100

(C)	
% ORGANIC MATTER	
0-1	12
1½-2	70
2½-3	17
3½-4	1
4½-5	0
5+	0
TOT.	100

OTTAWA COUNTY - 1463 SAMPLES

(A) POTASSIUM				
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)
L	-	-	13	13
M	1	2	46	49
H	-	2	36	38
TOT. FOR K (READ ACROSS)	1	4	95	100

(B) pH								
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
T/A	6.6+	6.2	5.8	5.4	5.0	4.6		
0	35							35
1-1½		24	6					30
2-2½		6	16	5				27
3-3½			1	4	2			7
4-4½						1		1
5+								0
TOT.	35	30	23	9	2	1	0	100

(C)	
% ORGANIC MATTER	
0-1	0
1½-2	6
2½-3	42
3½-4	40
4½-5	9
5+	3
TOT.	100

PAULDING COUNTY - 1055 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
PHOSPHORUS	L	M	H	
L	-	1	25	26
M	-	2	56	58
H	-	1	15	16
TOT. FOR K (READ ACROSS)	0	4	96	100

(B)	pH							
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.
T/A	less							
0	17							17
1-1½		25	8					33
2-2½		12	21	4	1			38
3-3½			2	5	2			9
4-4½				1	1			2
5+						1		1
TOT.	17	37	31	10	4	1	0	100

(C)	% ORGANIC MATTER	
0-1	-----	0
1½-2	-----	7
2½-3	-----	42
3½-4	-----	46
4½-5	-----	4
5+	-----	1
TOT.		100

PERRY COUNTY - 462 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
PHOSPHORUS	L	M	H	
L	6	15	16	37
M	5	20	26	51
H	-	2	10	12
TOT. FOR K (READ ACROSS)	11	37	52	100

(B)	pH							
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.
T/A	less							
0	13							13
1-1½		21	12	4				37
2-2½			10	8	7			25
3-3½				4	8	2		14
4-4½					1	5	1	7
5+						2	2	4
TOT.	13	21	22	16	16	9	3	100

(C)	% ORGANIC MATTER	
0-1	-----	11
1½-2	-----	73
2½-3	-----	13
3½-4	-----	2
4½-5	-----	1
5+	-----	0
TOT.		100

PICKAWAY COUNTY - 2761 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
PHOSPHORUS	L	M	H	
L	6	20	9	35
M	3	20	22	45
H	1	3	16	20
TOT. FOR K (READ ACROSS)	10	43	47	100

(B)	pH							
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.
T/A	less							
0	28							28
1-1½		20	14	5				39
2-2½		1	9	9	3			22
3-3½				4	4	1		9
4-4½						2		2
5+								0
TOT.	28	21	23	18	7	3	0	100

(C)	% ORGANIC MATTER	
0-1	-----	5
1½-2	-----	57
2½-3	-----	29
3½-4	-----	6
4½-5	-----	2
5+	-----	1
TOT.		100

PIKE COUNTY - 492 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
PHOSPHORUS	L	M	H	
L	10	21	25	56
M	7	8	16	31
H		1	12	13
TOT. FOR K (READ ACROSS)	17	30	53	100

(B)	pH							
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.
T/A	less							
0	20							20
1-1½		12	7	3				22
2-2½			9	8	4			21
3-3½				5	15	4		24
4-4½					2	7		9
5+						2	2	4
TOT.	20	12	16	16	21	13	2	100

(C)	% ORGANIC MATTER	
0-1	-----	12
1½-2	-----	69
2½-3	-----	17
3½-4	-----	2
4½-5	-----	-
5+	-----	-
TOT.		100

PORTAGE COUNTY - 378 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
PHOSPHORUS	L	M	H	
L	2	8	12	22
M	5	20	18	43
H	6	10	19	35
TOT. FOR K (READ ACROSS)	13	38	49	100

(B)	pH							
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.
T/A	less							
0	9							9
1-1½		21	4					25
2-2½		3	16	7				26
3-3½				10	9	1		20
4-4½					4	4		8
5+					1	7	4	12
TOT.	9	24	20	17	14	12	4	100

(C)	% ORGANIC MATTER	
0-1	-----	3
1½-2	-----	45
2½-3	-----	46
3½-4	-----	5
4½-5	-----	-
5+	-----	1
TOT.		100

PREBLE COUNTY - 1077 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
PHOSPHORUS	L	M	H	
L	3	9	8	20
M	2	22	32	56
H	-	3	21	24
TOT. FOR K (READ ACROSS)	5	34	61	100

(B)	pH							
LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or	TOT.
T/A	less							
0	27							27
1-1½		22	10	1				33
2-2½		1	15	11	2			29
3-3½				6	4			10
4-4½						1		1
5+								0
TOT.	27	23	25	18	6	1	0	100

(C)	% ORGANIC MATTER	
0-1	-----	2
1½-2	-----	53
2½-3	-----	41
3½-4	-----	4
4½-5	-----	-
5+	-----	-
TOT.		100

FUTNAM COUNTY - 1434 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	
L	-	2	10	12
M	1	4	54	59
H	-	-	29	29
TOT. FOR K (READ ACROSS)	1	6	93	100

(B)	pH							TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	12							12
1-1½		22	15	1				38
2-2½		4	20	12	1			37
3-3½			1	6	3			10
4-4½					1	1		2
5+						1		1
TOT.	12	26	36	19	5	2	0	100

(C)	% ORGANIC MATTER
0-1	-----
1½-2	-----
2½-3	-----
3½-4	-----
4½-5	-----
5+	-----
TOT.	100

RICHLAND COUNTY - 1274 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	
L	6	9	4	19
M	8	26	21	55
H	2	5	19	26
TOT. FOR K (READ ACROSS)	16	40	44	100

(B)	pH							TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	11							11
1-1½		15	7	1				23
2-2½		1	13	11	2	1		28
3-3½				8	14	2		24
4-4½					1	7	1	9
5+					1	2	2	5
TOT.	11	16	20	20	18	12	3	100

(C)	% ORGANIC MATTER
0-1	-----
1½-2	-----
2½-3	-----
3½-4	-----
4½-5	-----
5+	-----
TOT.	100

ROSS COUNTY - 1084 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	
L	6	16	16	38
M	3	15	23	41
H	-	4	17	21
TOT. FOR K (READ ACROSS)	9	35	56	100

(B)	pH							TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	34							34
1-1½		17	9	2				28
2-2½		1	9	8	3			21
3-3½				6	7	1		14
4-4½						2		2
5+							1	1
TOT.	34	18	18	16	10	3	1	100

(C)	% ORGANIC MATTER
0-1	-----
1½-2	-----
2½-3	-----
3½-4	-----
4½-5	-----
5+	-----
TOT.	100

SANDUSKY COUNTY - 728 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	
L	2	5	8	15
M	9	10	34	53
H	4	7	21	32
TOT. FOR K (READ ACROSS)	15	22	63	100

(B)	pH							TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	53							53
1-1½		26	8	1				35
2-2½		2	6	2	1			11
3-3½				1				1
4-4½								0
5+								0
TOT.	53	28	14	4	1	0	0	100

(C)	% ORGANIC MATTER
0-1	-----
1½-2	-----
2½-3	-----
3½-4	-----
4½-5	-----
5+	-----
TOT.	100

SCIOTO COUNTY - 681 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	
L	7	19	20	46
M	4	11	20	35
H	0	3	16	19
TOT. FOR K (READ ACROSS)	11	33	56	100

(B)	pH							TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	16							16
1-1½		16	9	3				28
2-2½			12	8	5			25
3-3½				5	14	2		21
4-4½					1	5	1	7
5+						2	1	3
TOT.	16	16	21	16	20	9	2	100

(C)	% ORGANIC MATTER
0-1	-----
1½-2	-----
2½-3	-----
3½-4	-----
4½-5	-----
5+	-----
TOT.	100

SENECA COUNTY 3403 SAMPLES

(A)	POTASSIUM			TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	
L	1	8	7	16
M	2	18	39	59
H	-	3	22	25
TOT. FOR K (READ ACROSS)	3	29	68	100

(B)	pH							TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	21							21
1-1½		18	9	1				28
2-2½		2	13	10	2			27
3-3½				6	10	1		17
4-4½					1	4		5
5+						1	1	2
TOT.	21	20	22	17	13	6	1	100

(C)	% ORGANIC MATTER
0-1	-----
1½-2	-----
2½-3	-----
3½-4	-----
4½-5	-----
5+	-----
TOT.	100

SHELBY COUNTY - 1931 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	1	10	13	24
M	1	10	47	58
H	-	-	18	18
TOT. FOR K (READ ACROSS)				
	2	20	78	100

(B) LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	16							16
1-1½		24	9	1				34
2-2½		3	20	12	1			36
3-3½				8	5			13
4-4½						1		1
5+								0
TOT.								
	16	27	29	21	6	1		100

(C)	% ORGANIC MATTER
0-1	----- 1
1½-2	----- 38
2½-3	----- 52
3½-4	----- 7
4½-5	----- 1
5+	----- 1
TOT.	
	100

STARK COUNTY - 571 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	3	2	2	7
M	9	20	17	46
H	3	11	33	47
TOT. FOR K (READ ACROSS)				
	15	33	52	100

(B) LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	18							18
1-1½		29	7	1				37
2-2½		1	11	10	2			24
3-3½				5	6	1		12
4-4½					1	3	1	5
5+						2	2	4
TOT.								
	18	30	18	16	9	6	3	100

(C)	% ORGANIC MATTER
0-1	----- 2
1½-2	----- 53
2½-3	----- 40
3½-4	----- 3
4½-5	----- 1
5+	----- 1
TOT.	
	100

SUMMIT COUNTY - 198 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	8	6	7	21
M	13	16	15	44
H	3	7	25	35
TOT. FOR K (READ ACROSS)				
	24	29	47	100

(B) LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	16							16
1-1½		23	6	2				31
2-2½		2	15	7	1			25
3-3½				4	6	3		13
4-4½					1	2	2	5
5+						5	5	10
TOT.								
	16	25	21	13	8	10	7	100

(C)	% ORGANIC MATTER
0-1	----- 4
1½-2	----- 55
2½-3	----- 30
3½-4	----- 3
4½-5	----- 0
5+	----- 8
TOT.	
	100

TRUMBULL COUNTY - 525 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	8	6	3	17
M	18	22	13	53
H	4	11	15	30
TOT. FOR K (READ ACROSS)				
	30	39	31	100

(B) LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	8							8
1-1½		14	5	1				20
2-2½		3	14	7	2			26
3-3½			2	8	10	1		21
4-4½				1	5	5		11
5+				1	2	7	4	14
TOT.								
	8	17	21	18	19	13	4	100

(C)	% ORGANIC MATTER
0-1	----- 1
1½-2	----- 38
2½-3	----- 55
3½-4	----- 5
4½-5	----- 1
5+	----- -
TOT.	
	100

TUSCARAWAS COUNTY - 1147 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	6	9	6	21
M	7	20	21	48
H	4	9	18	31
TOT. FOR K (READ ACROSS)				
	17	38	45	100

(B) LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	24							24
1-1½		19	7	1				27
2-2½		2	12	7	2			23
3-3½				5	9	1		15
4-4½					1	5	1	7
5+						1	3	4
TOT.								
	24	21	19	13	12	7	4	100

(C)	% ORGANIC MATTER
0-1	----- 4
1½-2	----- 71
2½-3	----- 24
3½-4	----- 1
4½-5	----- -
5+	----- -
TOT.	
	100

UNION COUNTY - 1494 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	2	11	17	30
M	1	11	41	53
H	-	1	16	17
TOT. FOR K (READ ACROSS)				
	3	23	74	100

(B) LIME T/A	pH							
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.
0	22							22
1-1½		26	8	1				35
2-2½		1	16	11	2			30
3-3½			1	5	5			11
4-4½					1	1		2
5+								0
TOT.								
	22	27	25	17	8	1	0	100

(C)	% ORGANIC MATTER
0-1	----- 1
1½-2	----- 42
2½-3	----- 43
3½-4	----- 11
4½-5	----- 3
5+	----- -
TOT.	
	100

VAN WERT COUNTY - 2141 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	-	2	6	8
M	-	5	54	59
H	0	1	32	33
TOT. FOR K (READ ACROSS)	0	8	92	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	17							17
1-1 1/2		24	7					31
2-2 1/2		7	24	9	1			41
3-3 1/2			1	5	3			9
4-4 1/2					1	1		2
5+								0
TOT.	17	31	32	14	5	1	0	100

(C)	
% ORGANIC MATTER	
0-1	-
1 1/2-2	13
2 1/2-3	51
3 1/2-4	31
4 1/2-5	4
5+	1
TOT.	100

VINTON COUNTY - 298 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	8	24	23	55
M	7	8	18	33
H	1	3	8	12
TOT. FOR K (READ ACROSS)	16	35	49	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	19							19
1-1 1/2		17	6	2				25
2-2 1/2		1	8	8	3			20
3-3 1/2				5	13	2		20
4-4 1/2						9	1	10
5+						3	3	6
TOT.	19	18	14	15	16	14	4	100

(C)	
% ORGANIC MATTER	
0-1	16
1 1/2-2	65
2 1/2-3	16
3 1/2-4	3
4 1/2-5	-
5+	-
TOT.	100

WARREN COUNTY - 1949 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	11	10	3	24
M	13	22	12	47
H	2	7	20	29
TOT. FOR K (READ ACROSS)	26	39	35	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	18							18
1-1 1/2		21	12	4	1	1		39
2-2 1/2			11	11	4			27
3-3 1/2				4	8	2		13
4-4 1/2						1	2	3
5+								0
TOT.	18	21	23	19	13	4	2	100

(C)	
% ORGANIC MATTER	
0-1	11
1 1/2-2	72
2 1/2-3	15
3 1/2-4	2
4 1/2-5	-
5+	-
TOT.	100

WASHINGTON COUNTY - 1301 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	4	19	22	45
M	2	10	27	39
H	-	3	13	16
TOT. FOR K (READ ACROSS)	6	32	62	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	10							10
1-1 1/2		14	5	2				21
2-2 1/2		1	10	11	4	2		28
3-3 1/2				5	15	4		24
4-4 1/2					1	8	1	10
5+						4	3	7
TOT.	10	15	15	18	20	18	4	100

(C)	
% ORGANIC MATTER	
0-1	12
1 1/2-2	76
2 1/2-3	11
3 1/2-4	1
4 1/2-5	-
5+	-
TOT.	100

WAYNE COUNTY - 2506 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	3	5	2	10
M	9	22	21	52
H	2	8	28	38
TOT. FOR K (READ ACROSS)	14	35	51	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	21							21
1-1 1/2		26	6					32
2-2 1/2		1	17	8	1			27
3-3 1/2				6	6	1		13
4-4 1/2					2	3		5
5+						1	1	2
TOT.	21	27	23	14	9	5	1	100

(C)	
% ORGANIC MATTER	
0-1	6
1 1/2-2	73
2 1/2-3	17
3 1/2-4	1
4 1/2-5	1
5+	2
TOT.	100

WILLIAMS COUNTY - 1719 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	1	5	6	12
M	2	17	35	54
H	1	5	28	34
TOT. FOR K (READ ACROSS)	4	27	69	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	14							14
1-1 1/2		20	12	2				34
2-2 1/2		2	16	11	3			32
3-3 1/2				7	7	1		15
4-4 1/2				1	1	2	1	5
5+								0
TOT.	14	22	28	21	11	3	1	100

(C)	
% ORGANIC MATTER	
0-1	1
1 1/2-2	34
2 1/2-3	52
3 1/2-4	9
4 1/2-5	2
5+	2
TOT.	100

WOOD COUNTY - 2941 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	1	2	10	13
M	3	6	46	55
H	2	4	26	32
TOT. FOR K (READ ACROSS)	6	12	82	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	22							22
1-1 1/2		30	16	1				47
2-2 1/2		3	17	7	1			28
3-3 1/2				2	1			3
4-4 1/2								0
5+								0
TOT.	22	33	33	10	2	0	0	100

(C)	
% ORGANIC MATTER	
0-1	1
1 1/2-2	5
2 1/2-3	32
3 1/2-4	47
4 1/2-5	13
5+	2
TOT.	100

WYANDOT COUNTY - 1150 SAMPLES

(A) PHOSPHORUS	POTASSIUM			TOT. FOR P (READ DOWN)
	L	M	H	
L	2	5	5	12
M	3	20	36	59
H	-	4	25	29
TOT. FOR K (READ ACROSS)	5	29	66	100

(B) LIME T/A	pH							TOT.
	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
0	28							28
1-1 1/2		23	6					29
2-2 1/2		4	14	6	1			25
3-3 1/2		1	1	6	4	1		13
4-4 1/2				1	2	2		5
5+								0
TOT.	28	28	21	13	7	3	0	100

(C)	
% ORGANIC MATTER	
0-1	1
1 1/2-2	38
2 1/2-3	43
3 1/2-4	11
4 1/2-5	3
5+	4
TOT.	100

TABLE 3. PERCENT DISTRIBUTION OF SOIL TEST RESULTS BY SOIL AREA AND/OR SOIL TYPE
SOIL AREA 1 - LAKE PLAIN - 1264 SAMPLES
(PAULDING AND ROSELMS)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A										
					0	16							16	0-1	----- 0
L	-	2	21	23	1-1½		21	8					29	1½-2	----- 9
					2-2½		8	22	7				37	2½-3	----- 42
M	-	2	58	60	3-3½			2	6	5			13	3½-4	----- 43
					4-4½				1	1	1		3	4½-5	----- 5
H	-	-	17	17	5+					1	1		2	5+	----- 1
TOT. FOR K (READ ACROSS)	0	4	96	100	TOT.	16	29	32	14	7	2	0	100	TOT.	100

SOIL AREA 2 - LAKE PLAIN - 13865 SAMPLES
(HOYTVILLE, TOLEDO, NAPPANEE, FULTON, WAUSEON, GRANBY, RIMER, SEWARD, OTTOKEE, TEDROW)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A										
					0	24							24	0-1	----- 1
L	1	2	9	12	1-1½		27	12	1				40	1½-2	----- 12
					2-2½		5	17	7				29	2½-3	----- 41
M	3	6	43	52	3-3½			1	3	2			6	3½-4	----- 36
					4-4½					1			1	4½-5	----- 8
H	2	4	30	36	5+								0	5+	----- 2
TOT. FOR K (READ ACROSS)	6	12	82	100	TOT.	24	32	30	11	3	0	0	100	TOT.	100

SOIL AREA 3 - GLACIATED CLAY TILL - 16099 SAMPLES
(PEWAMO, BLOUNT, MORLEY)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A										
					0	18							18	0-1	----- 1
L	1	7	8	16	1-1½		23	9	1				33	1½-2	----- 35
					2-2½		2	17	11	2			32	2½-3	----- 51
M	1	15	44	60	3-3½			1	6	6	1		14	3½-4	----- 10
					4-4½					1	2		3	4½-5	----- 2
H	-	1	23	24	5+								0	5+	----- 1
TOT. FOR K (READ ACROSS)	2	23	75	100	TOT.	18	25	27	18	9	3	0	100	TOT.	100

SOIL AREA 4 - GLACIATED LOAM TILL - 20203 SAMPLES
(BROOKSTON, CROSBY, MIAMI, CELINA)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A										
					0	27							27	0-1	----- 2
L	3	15	12	30	1-1½		25	11	2				38	1½-2	----- 48
					2-2½		2	14	8	1			25	2½-3	----- 36
M	2	16	33	51	3-3½				4	3			7	3½-4	----- 11
					4-4½					2	1		3	4½-5	----- 2
H	-	2	17	19	5+								0	5+	----- 1
TOT. FOR K (READ ACROSS)	5	33	62	100	TOT.	27	27	25	14	6	1	0	100	TOT.	100

SOIL AREA 5 - GLACIATED LOAM TILL WITH SILT MANYLE - 4752 SAMPLES
(BROOKSTON, RAGSDALE, FINCASTLE, REESVILLE, BURBECK, RUSSELL, XENIA)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A										
					0	21							21	0-1	----- 7
L	5	13	7	25	1-1½		25	13	3				41	1½-2	----- 68
					2-2½		1	12	10	1			24	2½-3	----- 21
M	4	26	22	52	3-3½				2	6	5		13	3½-4	----- 4
					4-4½						1		1	4½-5	----- -
H	-	4	19	23	5+								0	5+	----- -
TOT. FOR K (READ ACROSS)	9	43	48	100	TOT.	21	26	25	15	7	6	0	100	TOT.	100

SOIL AREA 6 - ILLINOIS GLACIATED LOAM TILL - 4380 SAMPLES
(BLANCHESTER, CLERMONT, AVONBURG, CINCINNATI, ROSSMOYNE, JESSUP, LONDON, GRAYFORD, EDENTON)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A										
					0	15							15	0-1	----- 16
L	17	13	8	38	1-1½		19	10	4				33	1½-2	----- 76
					2-2½			10	10	4	1		25	2½-3	----- 7
M	16	16	10	42	3-3½				6	11	2		19	3½-4	----- 1
					4-4½					2	3	1	6	4½-5	----- -
H	2	5	13	20	5+					1	1		2	5+	----- -
TOT. FOR K (READ ACROSS)	35	34	31	100	TOT.	15	19	20	20	17	7	2	100	TOT.	100

SOIL AREA 7 - RESIDUAL LIMESTONE - 375 SAMPLES
(FAIRMOUNT, MADDOX, HEITZ, BRATTON, HAGERSTOWN, CEDARVILLE, BURGIN)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A										
	L	5	15	34	54	0	30						30	0-1	10
	M	2	7	19	28	1-1 1/2		21	10	3	1		35	1 1/2-2	71
	H	0	1	17	18	2-2 1/2			11	7	4		22	2 1/2-3	15
TOT. FOR K (READ ACROSS)	7	23	70	100	TOT.	30	21	22	13	11	3	0	100	3 1/2-4	3
														4 1/2-5	1
														5+	0
														TOT.	100

SOIL AREA 8 - LACUSTRINE SANDSTONE AND SHALE - 649 SAMPLES
(OLMSTEAD, LORAIN, FRIES, MONROEVILLE, CANADEA, CANADICE, PAINESVILLE, WILMER, PLAINFIELD, COLOMA, CHENANGO)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
	L	4	4	5	13	T/A									
	M	9	15	18	42	0	18						18	0-1	3
	H	5	12	28	45	1-1 1/2		16	7	2			25	1 1/2-2	30
TOT. FOR K (READ ACROSS)	18	31	51	100	TOT.	18	17	18	19	17	9	2	100	2 1/2-3	39
														3 1/2-4	15
														4 1/2-5	7
														5+	6
														TOT.	100

SOIL AREA 9 - GLACIATED LIMESTONE - SANDSTONE - SHALE - 6721 SAMPLES
(MARENGO, CONDIT - BENNINGTON, ALEXANDRIA - CARDINGTON)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
	L	5	13	7	25	T/A									
	M	4	23	30	57	0	10						10	0-1	3
	H	-	3	15	18	1-1 1/2		14	7	1			16	1 1/2-2	54
TOT. FOR K (READ ACROSS)	9	39	52	100	TOT.	10	16	21	23	19	8	3	100	2 1/2-3	36
														3 1/2-4	5
														4 1/2-5	1
														5+	1
														TOT.	100

SOIL AREA 10 - GLACIATED CLAY - CLAY LOAM TILL - 3337 SAMPLES
(TRUMBULL, MAHONING, ELLSWORTH)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
	L	4	11	6	21	T/A									
	M	5	25	28	58	0	6						6	0-1	1
	H	1	4	16	21	1-1 1/2		11	5				16	1 1/2-2	25
TOT. FOR K (READ ACROSS)	10	40	50	100	TOT.	6	15	21	21	21	12	4	100	2 1/2-3	58
														3 1/2-4	14
														4 1/2-5	2
														5+	0
														TOT.	100

SOIL AREA 11 - GLACIATED SANDSTONE & SHALE (FRAGIPAN) - 707 SAMPLES
(CAMBRIDGE, VENANGO, ALDEN)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
	L	4	8	8	20	T/A									
	M	11	22	19	52	0	3						3	0-1	--
	H	3	8	17	28	1-1 1/2		10	3	1			14	1 1/2-2	17
TOT. FOR K (READ ACROSS)	18	38	44	100	TOT.	3	13	20	20	20	19	5	100	2 1/2-3	57
														3 1/2-4	22
														4 1/2-5	3
														5+	1
														TOT.	100

SOIL AREA 12 - GLACIATED SHALE AND SANDSTONE SILTY CLAY LOAM TILL - 2275 SAMPLES
(WADSWORTH, TRUMBULL, WAYNE, RITTMAN)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
	L	3	9	6	18	T/A									
	M	6	21	26	53	0	16						16	0-1	2
	H	1	4	24	29	1-1 1/2		20	5	1			26	1 1/2-2	38
TOT. FOR K (READ ACROSS)	10	34	56	100	TOT.	16	22	22	17	14	6	3	100	2 1/2-3	51
														3 1/2-4	8
														4 1/2-5	1
														5+	0
														TOT.	100

SOIL AREA 13 - GLACIATED SANDSTONE - 4576 SAMPLES
(CHIPPEWA, RAVENNA - TRUMBULL, WOOSTER - CANFIELD)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	3	5	2	10	0	18							18	0-1	6
					1-1½		23	7	1				31	1½-2	67
M	10	23	17	50	2-2½		2	14	9	2			27	2½-3	24
					3-3½				6	9	1		16	3½-4	2
H	3	11	26	40	4-4½					1	4	1	6	4½-5	1
					5+						1	1	2	5+	0
TOT. FOR K (READ ACROSS)	16	39	45	100	TOT.	18	25	21	16	12	6	2	100	TOT.	100

SOIL AREA 14 - ILLINOIS GLACIATED SANDSTONE AND SHALE - 550 SAMPLES
(HANOVER, FALLSBURG, MILLWOOD, LOUDONVILLE)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	4	9	9	22	0	9							9	0-1	8
					1-1½		14	10	3				27	1½-2	79
M	6	19	27	52	2-2½			10	10	5	1		26	2½-3	12
					3-3½				7	15	4		26	3½-4	1
H	2	4	20	26	4-4½					1	8	1	10	4½-5	0
					5+							2	2	5+	0
TOT. FOR K (READ ACROSS)	12	32	56	100	TOT.	9	14	20	20	21	13	3	100	TOT.	100

SOIL AREA 15 - RESIDUAL SANDSTONE AND SHALE - 9374 SAMPLES
(MUSKINGUM - KEENE - WELLSTON, TILSIT, JOHNSBURG)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	5	15	21	41	0	12							12	0-1	12
					1-1½		14	6	1				21	1½-2	70
M	3	12	26	41	2-2½		1	11	9				21	2½-3	16
					3-3½				7	13	3		23	3½-4	2
H	1	3	14	18	4-4½					5	10	2	17	4½-5	0
					5+						3	3	6	5+	0
TOT. FOR K (READ ACROSS)	9	30	61	100	TOT.	12	15	17	17	18	16	5	100	TOT.	100

SOIL AREA 16 - RESIDUAL SANDSTONE AND SHALE - 421 SAMPLES
(WESTMORELAND)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	1	9	23	33	0	12							12	0-1	6
					1-1½		17	6	1				24	1½-2	63
M	1	9	36	46	2-2½		1	8	9	3	1		22	2½-3	27
					3-3½				7	12	1		20	3½-4	3
H	-	1	20	21	4-4½				1	4	5	1	11	4½-5	1
					5+					1	6	4	11	5+	0
TOT. FOR K (READ ACROSS)	2	19	79	100	TOT.	12	18	14	18	20	13	5	100	TOT.	100

SOIL AREA 17 - RESIDUAL SANDSTONE AND SHALE - 2459 SAMPLES
(MEIGS - UPSHUR)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	3	16	30	49	0	9							9	0-1	14
					1-1½		11	5	2	1			19	1½-2	71
M	1	8	29	38	2-2½		1	9	10	4	3		27	2½-3	14
					3-3½				8	15	4		27	3½-4	1
H	-	1	12	13	4-4½					2	9	1	12	4½-5	0
					5+						4	2	6	5+	0
TOT. FOR K (READ ACROSS)	4	25	71	100	TOT.	9	12	14	20	22	20	3	100	TOT.	100

SOIL AREA 18 - RESIDUAL SANDSTONE AND SHALE - STEEP AREAS - 1527 SAMPLES
(WESTMORELAND - MEIGS - MUSKINGUM)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	4	17	28	49	0	11							11	0-1	8
					1-1½		14	9	1				24	1½-2	72
M	2	10	23	35	2-2½		1	10	10	5	1		27	2½-3	18
					3-3½				6	14	4		24	3½-4	2
H	1	2	13	16	4-4½					2	7		9	4½-5	0
					5+						2	3	5	5+	0
TOT. FOR K (READ ACROSS)	7	29	64	100	TOT.	11	15	19	17	21	14	3	100	TOT.	100

TABLE 4. PERCENT DISTRIBUTION OF SOIL TEST RESULTS BY SOIL TYPES WITHIN MAJOR SOIL AREAS
 SOIL AREA 1 - LAKE PLAIN - DARK COLORED, VERY FINE TEXTURE - 997 SAMPLES
 (PAULDING - LATTY)

(A) POTASSIUM					(B)								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	pH 5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	-	1	21	22	0	17							17	0-1	0
M	-	1	59	60	1-1½		23	8					31	1½-2	4
H	-	1	17	18	2-2½		9	23	6				38	2½-3	39
TOT. FOR K (READ ACROSS)	0	3	97	100	3-3½			3	6	2			11	3½-4	51
					4-4½				1	1			2	4½-5	6
					5+						1		1	5+	0
					TOT.	17	32	34	13	3	1	0	100	TOT.	100

SOIL AREA 1 - LAKE PLAIN - LIGHT COLORED, MEDIUM TEXTURED - 268 SAMPLES
 (ROSELMS)

(A) POTASSIUM					(B)								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	pH 5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	-	4	19	23	0	9							9	0-1	1
M	-	4	53	57	1-1½		12	10	1				23	1½-2	30
H	0	1	19	20	2-2½		6	17	10	1			34	2½-3	53
TOT. FOR K (READ ACROSS)	0	9	91	100	3-3½			3	9	10	1		23	3½-4	16
					4-4½				2	2	3		7	4½-5	-
					5+					3	1		4	5+	-
					TOT.	9	18	30	22	16	5	0	100	TOT.	100

SOIL AREA 2 - LAKE PLAIN - LIGHT COLORED SANDS - 789 SAMPLES
 (RIMER - SEWARD - OTTOKEE - TEDROW)

(A) POTASSIUM					(B)								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	pH 5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	2	2	1	5	0	22							22	0-1	15
M	7	11	9	27	1-1½		21	26	8	3			58	1½-2	60
H	8	24	36	68	2-2½			3	8	5	1		17	2½-3	23
TOT. FOR K (READ ACROSS)	17	37	46	100	3-3½				1	1	1		3	3½-4	1
					4-4½								0	4½-5	1
					5+								0	5+	0
					TOT.	22	21	29	17	9	2	0	100	TOT.	100

SOIL AREA 2 - LAKE PLAIN - DARK COLORED, FINE TEXTURED - 6846 SAMPLES
 (HOYTVILLE, TOLEDO)

(A) POTASSIUM					(B)								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	pH 5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	-	1	11	12	0	26							26	0-1	1
M	1	4	51	56	1-1½		29	10					39	1½-2	2
H	-	1	31	32	2-2½		6	19	5				30	2½-3	31
TOT. FOR K (READ ACROSS)	1	6	93	100	3-3½			1	3	1			5	3½-4	50
					4-4½								0	4½-5	13
					5+								0	5+	3
					TOT.	26	35	30	8	1	0	0	100	TOT.	100

SOIL AREA 2 - LAKE PLAIN - LIGHT COLORED, MEDIUM TEXTURED - 4015 SAMPLES
 (NAPPANEE - FULTON)

(A) POTASSIUM					(B)								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	pH 5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	1	3	11	15	0	21							21	0-1	1
M	1	5	52	58	1-1½		24	11	1				36	1½-2	17
H	-	1	26	27	2-2½		4	19	10				33	2½-3	53
TOT. FOR K (READ ACROSS)	2	9	89	100	3-3½			1	5	3			9	3½-4	26
					4-4½						1		1	4½-5	3
					5+								0	5+	0
					TOT.	21	28	31	16	3	1	0	100	TOT.	100

SOIL AREA 2 - LAKE PLAIN - DARK COLORED SANDS - 2215 SAMPLES
 (WAUSEON - GRANBY)

(A) POTASSIUM					(B)								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	pH 5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	3	2	2	7	0	26							26	0-1	1
M	13	15	12	40	1-1½		29	20	3				52	1½-2	17
H	7	15	31	53	2-2½		2	8	6	1			17	2½-3	54
TOT. FOR K (READ ACROSS)	23	32	45	100	3-3½				1	1			2	3½-4	21
					4-4½				1	1	1		3	4½-5	4
					5+								0	5+	3
					TOT.	26	31	28	11	3	1	0	100	TOT.	100

SOIL AREA 3 - GLACIATED CLAY LOAM TILL - LIGHT COLORED, POORLY DRAINED - 7163 SAMPLES (BLOUNT)

(A) POTASSIUM					(B) pH					(C)					
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	1	7	8	16	0	18							18	0-1 ----- 1	
M	1	15	43	59	1-1 1/2		23	10	1				34	1 1/2-2 ----- 35	
H	1	1	23	25	2-2 1/2		2	17	12	2			33	2 1/2-3 ----- 58	
TOT. FOR K (READ ACROSS)	3	23	74	100	3-3 1/2				7	6	1		14	3 1/2-4 ----- 6	
					4-4 1/2						1		1	4 1/2-5 ----- 0	
					5+								0	5+ ----- 0	
TOT.					TOT.	18	25	27	20	8	2	0	100	TOT.	100

SOIL AREA 3 - GLACIATED CLAY LOAM TILL - LIGHT COLORED - 5047 SAMPLES (MORLEY)

(A) POTASSIUM					(B) pH					(C)					
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	1	9	8	18	0	16							16	0-1 ----- 1	
M	2	19	42	63	1-1 1/2		21	10	2				33	1 1/2-2 ----- 57	
H	-	2	17	19	2-2 1/2		1	15	12	3			31	2 1/2-3 ----- 39	
TOT. FOR K (READ ACROSS)	3	30	67	100	3-3 1/2				6	9	1		16	3 1/2-4 ----- 2	
					4-4 1/2					1	3		4	4 1/2-5 ----- 1	
					5+								0	5+ ----- 0	
TOT.					TOT.	16	22	25	20	13	4	0	100	TOT.	100

SOIL AREA 3 - GLACIATED CLAY LOAM TILL - DARK COLORED, GLACIATED - 3889 SAMPLES (PEWAMO)

(A) POTASSIUM					(B) pH					(C)					
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	-	4	7	11	0	22							22	0-1 ----- 1	
M	1	8	47	56	1-1 1/2		26	8					34	1 1/2-2 ----- 7	
H	-	1	32	33	2-2 1/2		5	20	8				33	2 1/2-3 ----- 54	
TOT. FOR K (READ ACROSS)	1	13	86	100	3-3 1/2			2	5	2			9	3 1/2-4 ----- 29	
					4-4 1/2					1	1		2	4 1/2-5 ----- 6	
					5+								0	5+ ----- 3	
TOT.					TOT.	22	31	30	13	3	1	0	100	TOT.	100

SOIL AREA 4 - GLACIATED LOAM TILL - DARK COLORED - 6276 SAMPLES (BROOKSTON - KOKOMO)

(A) POTASSIUM					(B) pH					(C)					
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	1	10	15	26	0	31							31	0-1 ----- 1	
M	-	11	41	52	1-1 1/2		25	8	1				34	1 1/2-2 ----- 14	
H	-	2	20	22	2-2 1/2		3	17	7				27	2 1/2-3 ----- 49	
TOT. FOR K (READ ACROSS)	1	23	76	100	3-3 1/2			1	4	1			6	3 1/2-4 ----- 28	
					4-4 1/2					1	1		2	4 1/2-5 ----- 6	
					5+								0	5+ ----- 2	
TOT.					TOT.	31	28	26	12	2	1	0	100	TOT.	100

SOIL AREA 4 - GLACIATED LOAM TILL - LIGHT COLORED, POORLY DRAINED - 6364 SAMPLES (CROSBY)

(A) POTASSIUM					(B) pH					(C)					
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	4	18	10	32	0	25							25	0-1 ----- 1	
M	2	19	30	51	1-1 1/2		26	13	2				41	1 1/2-2 ----- 51	
H	-	2	15	17	2-2 1/2		1	14	9	1			25	2 1/2-3 ----- 43	
TOT. FOR K (READ ACROSS)	6	39	55	100	3-3 1/2				4	3			7	3 1/2-4 ----- 5	
					4-4 1/2						2		2	4 1/2-5 ----- 0	
					5+								0	5+ ----- 0	
TOT.					TOT.	25	27	27	15	4	2	0	100	TOT.	100

SOIL AREA 4 - GLACIATED LOAM TILL - LIGHT COLORED - 7563 SAMPLES (MIAMI - CELINA)

(A) POTASSIUM					(B) pH					(C)					
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	4	17	12	33	0	26							26	0-1 ----- 5	
M	2	19	29	50	1-1 1/2		23	13	4				40	1 1/2-2 ----- 74	
H	-	2	15	17	2-2 1/2		1	12	10	2			25	2 1/2-3 ----- 20	
TOT. FOR K (READ ACROSS)	6	38	56	100	3-3 1/2				4	4			8	3 1/2-4 ----- 1	
					4-4 1/2						1		1	4 1/2-5 ----- -	
					5+								0	5+ ----- -	
TOT.					TOT.	26	24	25	18	6	1	0	100	TOT.	100

SOIL AREA 5 - GLACIATED LOAM TILL WITH SILT MANTLE - DARK COLORED - 860 SAMPLES
(BROOKSTON - RAGSDALE)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	1	8	7	16	0	22							22	0-1	1
					1-1 $\frac{1}{2}$		27	14	2				43	1 $\frac{1}{2}$ -2	31
M	1	23	26	50	2-2 $\frac{1}{2}$		2	15	10	1			28	2 $\frac{1}{2}$ -3	48
					3-3 $\frac{1}{2}$				4	3			7	3 $\frac{1}{2}$ -4	17
H	0	4	30	34	4-4 $\frac{1}{2}$								0	4 $\frac{1}{2}$ -5	2
					5+								0	5+	1
TOT. FOR K (READ ACROSS)	2	35	63	100	TOT.	22	29	29	16	4	0	0	100	TOT.	100

SOIL AREA 5 - GLACIATED LOAM TILL WITH SILT MANTLE - LIGHT COLORED, POORLY DRAINED - 1462 SAMPLES
(FINCASTLE - REESVILLE)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	7	11	3	21	0	19							19	0-1	5
					1-1 $\frac{1}{2}$		25	14	4				43	1 $\frac{1}{2}$ -2	68
M	6	32	19	57	2-2 $\frac{1}{2}$		1	12	11	2			26	2 $\frac{1}{2}$ -3	25
					3-3 $\frac{1}{2}$				4	6	1		11	3 $\frac{1}{2}$ -4	2
H	1	5	16	22	4-4 $\frac{1}{2}$						1		1	4 $\frac{1}{2}$ -5	0
					5+								0	5+	0
TOT. FOR K (READ ACROSS)	14	48	38	100	TOT.	19	26	26	19	8	2	0	100	TOT.	100

SOIL AREA 5 - GLACIATED LOAM TILL WITH SILT MANTLE - LIGHT COLORED - 2430 SAMPLES
(BURBECK - RUSSELL - XENIA)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	5	15	9	29	0	22							22	0-1	10
					1-1 $\frac{1}{2}$		25	12	4	1			42	1 $\frac{1}{2}$ -2	81
M	4	24	22	50	2-2 $\frac{1}{2}$		1	11	10	3			24	2 $\frac{1}{2}$ -3	9
					3-3 $\frac{1}{2}$				4	6	1		11	3 $\frac{1}{2}$ -4	-
H	-	4	17	21	4-4 $\frac{1}{2}$						1		1	4 $\frac{1}{2}$ -5	-
					5+								0	5+	-
TOT. FOR K (READ ACROSS)	9	43	48	100	TOT.	22	25	23	18	10	2	0	100	TOT.	100

SOIL AREA 6 - ILLINOIS GLACIATED LOAM TILL - DARK COLORED - 273 SAMPLES
(BLANCHESTER)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	4	12	8	24	0	21							21	0-1	4
					1-1 $\frac{1}{2}$		20	12	2				34	1 $\frac{1}{2}$ -2	69
M	5	17	14	36	2-2 $\frac{1}{2}$		1	13	9	3			26	2 $\frac{1}{2}$ -3	24
					3-3 $\frac{1}{2}$				7	7	2		16	3 $\frac{1}{2}$ -4	3
H	2	9	29	40	4-4 $\frac{1}{2}$					1	2		3	4 $\frac{1}{2}$ -5	-
					5+								0	5+	-
TOT. FOR K (READ ACROSS)	11	38	51	100	TOT.	21	21	25	18	11	4	0	100	TOT.	100

SOIL AREA 6 - ILLINOIS GLACIATED LOAM TILL - GRAY - 1660 SAMPLES
(CLERMONT - AVONBURG)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	26	9	1	36	0	16							16	0-1	19
					1-1 $\frac{1}{2}$		20	13	5	2			40	1 $\frac{1}{2}$ -2	75
M	28	18	5	51	2-2 $\frac{1}{2}$		1	9	9	5	2		25	2 $\frac{1}{2}$ -3	6
					3-3 $\frac{1}{2}$				5	8	2		15	3 $\frac{1}{2}$ -4	-
H	3	5	5	13	4-4 $\frac{1}{2}$						3	1	4	4 $\frac{1}{2}$ -5	-
					5+								0	5+	-
TOT. FOR K (READ ACROSS)	57	32	11	100	TOT.	16	20	22	19	15	7	1	100	TOT.	100

SOIL AREA 6 - ILLINOIS GLACIATED LOAM TILL - BROWN - 2447 SAMPLES
(LOUDON - GRAYFORD - EDENTON)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	12	16	12	40	0	14							14	0-1	16
					1-1 $\frac{1}{2}$		17	9	5				31	1 $\frac{1}{2}$ -2	78
M	9	15	13	37	2-2 $\frac{1}{2}$			11	12	5	1		29	2 $\frac{1}{2}$ -3	6
					3-3 $\frac{1}{2}$				6	12	2		20	3 $\frac{1}{2}$ -4	-
H	1	4	18	23	4-4 $\frac{1}{2}$					1	3	1	5	4 $\frac{1}{2}$ -5	-
					5+								1	5+	-
TOT. FOR K (READ ACROSS)	22	35	43	100	TOT.	14	17	20	23	18	7	1	100	TOT.	100

SOIL AREA 7 - RESIDUAL LIMESTONE - BROWN - 374 SAMPLES
(FAIRMOUNT - MADDOX - HEITZ - BRATTON - HAGERSTOWN - CEDARVILLE)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					0	30							30	0-1	10
L	4	16	34	54	1-1½		21	10	3	1			35	1½-2	71
M	2	7	20	29	2-2½			11	7	4			22	2½-3	15
H	0	0	17	17	3-3½			1	3	5			9	3½-4	3
TOT. FOR K (READ ACROSS)	6	23	71	100	4-4½					1	2		3	4½-5	1
					5+						1		1	5+	0
					TOT.	30	21	22	13	11	3	0	100	TOT.	100

SOIL AREA 8 - LACUSTRINE - SANDSTONE AND SHALE - DARK COLORED - 250 SAMPLES
(OLMSTED - LORAIN - FRIES - MONROEVILLE)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					0	30							30	0-1	0
L	2	6	8	16	1-1½		18	3					21	1½-2	4
M	6	13	22	41	2-2½		4	7	7	1			19	2½-3	36
H	1	8	34	43	3-3½		1	5	5	2			13	3½-4	29
TOT. FOR K (READ ACROSS)	9	27	64	100	4-4½			1	2	2	2		7	4½-5	18
					5+			1	2	3	3	1	10	5+	13
					TOT.	30	23	17	16	8	5	1	100	TOT.	100

SOIL AREA 8 - LACUSTRINE SANDSTONE AND SHALE - LIGHT COLORED - 203 SAMPLES
(CANADEA - CANADICE - PAINESVILLE - WILMER)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					0	26							26	0-1	1
L	5	6	5	16	1-1½		19	7	3				29	1½-2	39
M	11	22	23	56	2-2½		1	9	4	4			18	2½-3	52
H	0	7	21	28	3-3½				5	7	1		13	3½-4	7
TOT. FOR K (READ ACROSS)	16	35	49	100	4-4½				1	2	1		4	4½-5	1
					5+					2	5	3	10	5+	0
					TOT.	26	20	16	13	15	7	3	100	TOT.	100

SOIL AREA 8 - LACUSTRINE SANDSTONE AND SHALE - SANDS, ACID - 196 SAMPLES
(PLAINFIELD - COLOMA)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					0	20							20	0-1	10
L	3	1	1	5	1-1½		20	10	3	2			35	1½-2	54
M	12	11	6	29	2-2½		1	7	7	5	1		21	2½-3	31
H	15	22	29	66	3-3½				7	4	3	2	16	3½-4	4
TOT. FOR K (READ ACROSS)	30	34	36	100	4-4½					1	1	1	3	4½-5	1
					5+						2	3	5	5+	-
					TOT.	20	21	17	17	12	7	6	100	TOT.	100

SOIL AREA 9 - GLACIATED LIMESTONE - SANDSTONE - SHALE - LIGHT COLORED - 3192 SAMPLES
(ALEXANDRIA - CARDINGTON)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					0	9							9	0-1	6
L	5	13	7	25	1-1½		14	8	2				24	1½-2	71
M	5	24	28	57	2-2½		1	11	12	4	1		29	2½-3	23
H	-	3	15	18	3-3½				8	15	2		25	3½-4	-
TOT. FOR K (READ ACROSS)	10	40	50	100	4-4½					2	7	1	10	4½-5	-
					5+					1	1	1	3	5+	-
					TOT.	9	15	19	22	22	11	2	100	TOT.	100

SOIL AREA 9 - GLACIATED LIMESTONE - SANDSTONE - SHALE - DARK COLORED - 1157 SAMPLES
(MARENGO)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					0	13							13	0-1	1
L	2	9	7	18	1-1½		15	5					20	1½-2	18
M	2	19	35	56	2-2½		4	19	11				34	2½-3	55
H	1	3	22	26	3-3½			2	12	8			22	3½-4	20
TOT. FOR K (READ ACROSS)	5	31	64	100	4-4½				1	2	3		6	4½-5	5
					5+				1	2	1	1	5	5+	1
					TOT.	13	19	26	25	12	4	1	100	TOT.	100

SOIL AREA 9 - GLACIATED LIMESTONE - SANDSTONE - SHALE - LIGHT COLORED, POORLY DRAINED - 2372 SAMPLES
(CONDIT - BENNINGTON)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	6	13	7	26	0	9							9	0-1	2
					1-1½		15	7	2				24	1½-2	51
M	4	23	31	58	2-2½		2	14	13	3			32	2½-3	44
					3-3½			1	10	13	2		26	3½-4	3
H	1	2	13	16	4-4½					2	5		7	4½-5	0
					5+						1	1	2	5+	0
TOT. FOR K (READ ACROSS)	11	38	51	100	TOT.	9	17	22	25	18	8	1	100	TOT.	100

SOIL AREA 10 - GLACIATED CLAY - CLAY LOAM TILL - GRAY-BROWN - 1840 SAMPLES
(TRUMBULL - MAHONING)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	3	11	7	21	0	6							6	0-1	-
					1-1½		11	3					14	1½-2	16
M	6	22	28	56	2-2½		5	15	5	1			26	2½-3	62
					3-3½			3	14	8			25	3½-4	18
H	1	5	17	23	4-4½				2	7	3		12	4½-5	3
					5+				1	4	8	4	17	5+	1
TOT. FOR K (READ ACROSS)	10	38	52	100	TOT.	6	16	21	22	20	11	4	100	TOT.	100

SOIL AREA 10 - GLACIATED CLAY - CLAY LOAM TILL - LIGHT COLORED - 1498 SAMPLES
(BLLSWORTH)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	5	11	5	21	0	7							7	0-1	2
					1-1½		12	6					18	1½-2	37
M	4	28	26	58	2-2½		2	12	7	2			23	2½-3	53
					3-3½			1	11	9	2		23	3½-4	8
H	1	4	16	21	4-4½				2	6	5		13	4½-5	0
					5+					2	9	5	16	5+	0
TOT. FOR K (READ ACROSS)	10	43	47	100	TOT.	7	14	19	20	19	16	5	100	TOT.	100

SOIL AREA 11 - GLACIATED SANDSTONE AND SHALE (FRAGIPAN) - LIGHT COLORED - 311 SAMPLES
(CAMBRIDGE - VENANGO - 7-B-3 - 7-B-2)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	4	10	7	21	0	3							3	0-1	1
					1-1½		7	4					11	1½-2	23
M	7	22	23	52	2-2½		2	11	5				18	2½-3	52
					3-3½		1	4	15	11			31	3½-4	21
H	2	7	18	27	4-4½				2	10	6		18	4½-5	3
					5+				1	3	11	4	19	5+	-
TOT. FOR K (READ ACROSS)	13	39	48	100	TOT.	3	10	19	23	24	17	4	100	TOT.	100

SOIL AREA 11 - GLACIATED SANDSTONE AND SHALE - DARK COLORED - 203 SAMPLES
(ALDEN)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	3	8	8	19	0	4							4	0-1	-
					1-1½		14	2					16	1½-2	9
M	11	18	22	51	2-2½		4	20	5				29	2½-3	54
					3-3½			3	7	2	1		13	3½-4	28
H	3	8	19	30	4-4½				1	8	4		13	4½-5	6
					5+			1	2	6	11	5	25	5+	3
TOT. FOR K (READ ACROSS)	17	34	49	100	TOT.	4	18	26	15	16	16	5	100	TOT.	100

SOIL AREA 12 - GLACIATED SHALE AND SANDSTONE SCL TILL - GRAY-BROWN - 871 SAMPLES
(WADSWORTH - TRUMBULL)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	4	11	7	22	0	13							13	0-1	3
					1-1½		16	3	1				20	1½-2	41
M	6	21	24	51	2-2½		4	16	7				27	2½-3	48
					3-3½			1	10	9			20	3½-4	7
H	2	5	20	27	4-4½				1	5	4	1	11	4½-5	1
					5+					1	4	4	9	5+	0
TOT. FOR K (READ ACROSS)	12	37	51	100	TOT.	13	20	20	19	15	8	5	100	TOT.	100

SOIL AREA 12 - GLACIATED SHALE AND SANDSTONE SCL TILL - BROWN - 1404 SAMPLES
(WAYNE - RITTMAN)

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	3	7	5	15	
M	5	20	27	52	
H	1	4	28	33	
TOT. FOR K (READ ACROSS)	9	31	60	100	

(B)	pH								TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	
0	17							17	
1-1½		22	6	1				29	
2-2½		1	15	8	1			25	
3-3½			1	7	9	1		18	
4-4½				1	2	3		6	
5+					1	2	2	5	
TOT.	17	23	22	17	13	6	2	100	

(C)	% ORGANIC MATTER
0-1	5
1½-2	70
2½-3	24
3½-4	1
4½-5	0
5+	0
TOT.	100

SOIL AREA 13 - GLACIATED SANDSTONE - DARK COLORED - 254 SAMPLES
(CHIPPEWA)

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	4	5	3	12	
M	6	22	15	43	
H	2	10	33	45	
TOT. FOR K (READ ACROSS)	12	37	51	100	

(B)	pH								TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	
0	21							21	
1-1½		24	7	1				32	
2-2½		5	15	6				26	
3-3½				4	7			11	
4-4½				1	2	1	1	5	
5+				1	1	2	1	5	
TOT.	21	29	22	13	10	3	2	100	

(C)	% ORGANIC MATTER
0-1	4
1½-2	39
2½-3	39
3½-4	12
4½-5	5
5+	1
TOT.	100

SOIL AREA 13 - GLACIATED SANDSTONE - GRAY-BROWN - 986 SAMPLES
(RAVENNA - TRUMBULL)

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	4	5	3	12	
M	10	23	21	54	
H	2	9	23	34	
TOT. FOR K (READ ACROSS)	16	37	47	100	

(B)	pH								TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	
0	19							19	
1-1½		22	8					30	
2-2½		2	14	9	1			26	
3-3½			1	6	8	1		16	
4-4½				1	2	3		6	
5+						2	1	3	
TOT.	19	24	23	16	11	6	1	100	

(C)	% ORGANIC MATTER
0-1	2
1½-2	56
2½-3	37
3½-4	4
4½-5	1
5+	0
TOT.	100

SOIL AREA 13 - GLACIATED SANDSTONE - BROWN - 3337 SAMPLES
(WOOSTER - CANFIELD)

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	3	5	2	10	
M	10	22	16	48	
H	4	12	26	42	
TOT. FOR K (READ ACROSS)	17	39	44	100	

(B)	pH								TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	
0	18							18	
1-1½		24	7	1				32	
2-2½		1	15	9	2			27	
3-3½				6	9	1		16	
4-4½					1	3	1	5	
5+						1	1	2	
TOT.	18	25	22	16	12	5	2	100	

(C)	% ORGANIC MATTER
0-1	7
1½-2	75
2½-3	17
3½-4	1
4½-5	0
5+	0
TOT.	100

SOIL AREA 14 - ILLINOIS GLACIATED SANDSTONE AND SHALE - BROWN - 550 SAMPLES
(HANOVER - FALLSBURG - MILLWOOD - LOUDONVILLE)

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	4	10	9	23	
M	6	18	27	51	
H	2	4	20	26	
TOT. FOR K (READ ACROSS)	12	32	56	100	

(B)	pH								TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	
0	9							9	
1-1½		14	10	3				27	
2-2½			10	10	5	1		26	
3-3½				7	15	4		26	
4-4½					1	8	1	10	
5+							2	2	
TOT.	9	14	20	20	21	13	3	100	

(C)	% ORGANIC MATTER
0-1	8
1½-2	79
2½-3	12
3½-4	1
4½-5	0
5+	0
TOT.	100

SOIL AREA 15 - RESIDUAL SANDSTONE AND SHALE - BROWN - 7982 SAMPLES
(MUSKINGUM - KEENE - WELLSTON)

(A)	POTASSIUM				TOT. FOR P (READ DOWN)
	PHOSPHORUS	L	M	H	
L	5	15	21	41	
M	4	12	27	43	
H	0	3	13	16	
TOT. FOR K (READ ACROSS)	9	30	61	100	

(B)	pH								TOT.
	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	
T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	
0	12							12	
1-1½		14	7	2				23	
2-2½		1	11	9	4	1		26	
3-3½				6	13	3		22	
4-4½					2	8	1	11	
5+						3	3	6	
TOT.	12	15	18	17	19	15	4	100	

(C)	% ORGANIC MATTER
0-1	13
1½-2	73
2½-3	14
3½-4	0
4½-5	0
5+	0
TOT.	100

SOIL AREA 15 - RESIDUAL SANDSTONE AND SHALE - GRAY-BROWN - 1392 SAMPLES
(TILLOT, JOHNSEBURG, KEENE)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A		6.2	5.8	5.4	5.0	4.6				
					0	12							12	0-1	8
L	4	12	22	38	1-1 1/2		12	6	1				19	1 1/2-2	59
					2-2 1/2			12	9	2	1		25	2 1/2-3	29
M	5	10	23	38	3-3 1/2				9	13	2		24	3 1/2-4	4
					4-4 1/2					2	9	1	12	4 1/2-5	0
H	2	3	19	24	5+					1	3	4	8	5+	0
TOT. FOR K (READ ACROSS)	11	25	64	100	TOT.	12	13	18	19	18	15	5	100	TOT.	100

SOIL AREA 15 - RESIDUAL SANDSTONE AND SHALE - REDDISH BROWN - 2123 SAMPLES
(MEIGS - MUSKINGUM)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A		6.2	5.8	5.4	5.0	4.6				
					0	9							9	0-1	15
L	3	17	30	50	1-1 1/2		12	6	2				20	1 1/2-2	72
					2-2 1/2			9	10	4			23	2 1/2-3	12
M	1	9	28	38	3-3 1/2				8	16	4		28	3 1/2-4	1
					4-4 1/2					2	10	1	13	4 1/2-5	-
H	-	1	11	12	5+					1	4	2	7	5+	-
TOT. FOR K (READ ACROSS)	4	27	69	100	TOT.	9	12	15	20	23	18	3	100	TOT.	100

SOIL AREA 16 - RESIDUAL SANDSTONE AND SHALE - BROWNISH-RED, LIMESTONE INFLUENCE - 421 SAMPLES
(WESTMORELAND - MUSKINGUM)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A		6.2	5.8	5.4	5.0	4.6				
					0	12							12	0-1	6
L	2	9	23	34	1-1 1/2		17	6	1				24	1 1/2-2	63
					2-2 1/2		1	8	9	3	1		22	2 1/2-3	27
M	1	8	36	45	3-3 1/2				7	12	1		20	3 1/2-4	3
					4-4 1/2				1	4	5	1	11	4 1/2-5	1
H	-	1	20	21	5+					1	6	4	11	5+	-
TOT. FOR K (READ ACROSS)	3	18	79	100	TOT.	12	18	14	18	20	13	5	100	TOT.	100

SOIL AREA 17 - RESIDUAL SANDSTONE AND SHALE - REDDISH BROWN - RED - 346 SAMPLES
(UPSHUR)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A		6.2	5.8	5.4	5.0	4.6				
					0	14							14	0-1	4
L	0	5	31	36	1-1 1/2		7	6	2				15	1 1/2-2	64
					2-2 1/2		1	8	10	5	2		26	2 1/2-3	28
M	0	3	38	41	3-3 1/2				8	12	5		25	3 1/2-4	3
					4-4 1/2				1	1	8	1	11	4 1/2-5	1
H	0	1	22	23	5+						4	5	9	5+	-
TOT. FOR K (READ ACROSS)	0	9	91	100	TOT.	14	8	14	21	18	19	6	100	TOT.	100

SOIL AREA 18 - RESIDUAL SANDSTONE AND SHALE - BROWN, STEEP SOILS - 1527 SAMPLES
(MUSKINGUM - WESTMORELAND - MEIGS)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A		6.2	5.8	5.4	5.0	4.6				
					0	11							11	0-1	8
L	4	17	29	50	1-1 1/2		14	9	1				24	1 1/2-2	72
					2-2 1/2		1	10	10	5	1		27	2 1/2-3	18
M	2	9	23	34	3-3 1/2				6	14	4		24	3 1/2-4	2
					4-4 1/2					2	7		9	4 1/2-5	0
H	1	2	13	16	5+						2	3	5	5+	0
TOT. FOR K (READ ACROSS)	7	28	65	100	TOT.	11	15	19	17	21	14	3	100	TOT.	100

TERRACES - DARK COLORED, WESTERN OHIO - 893 SAMPLES
(WESTLAND - ABINGTON - PITCHLIN - SEBEWA - MONTGOMERY)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
					T/A		6.2	5.8	5.4	5.0	4.6				
					0	43							43	0-1	1
L	1	5	8	14	1-1 1/2		19	6	1				26	1 1/2-2	20
					2-2 1/2		4	13	5				22	2 1/2-3	42
M	1	9	33	43	3-3 1/2			1	4	2			7	3 1/2-4	25
					4-4 1/2				1	1			2	4 1/2-5	6
H	0	5	38	43	5+								0	5+	6
TOT. FOR K (READ ACROSS)	2	19	79	100	TOT.	43	23	20	11	3	0	0	100	TOT.	100

TERRACES - LIGHT COLORED, WESTERN OHIO - 1150 SAMPLES
(FOX - OCKLEY - MILLCREEK)

(A) POTASSIUM					(B) pH								(C)											
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER										
L	2	7	6	15	0	23							23	0-1	3									
					1-1½		25	14	1				40	1½-2	59									
M	3	17	29	49	2-2½		2	12	10	3			27	2½-3	34									
					3-3½				3	5			8	3½-4	4									
H	0	6	30	36	4-4½					1	1		2	4½-5	0									
					5+								0	5+	0									
TOT. FOR K (READ ACROSS)				5	30	65	100	TOT.							23	27	26	14	9	1	0	100	TOT.	100

TERRACES - DARK COLORED, EASTERN OHIO - 615 SAMPLES
(CHILLO - LURAY - REYNOLDS - BLAGO)

(A) POTASSIUM					(B) pH								(C)											
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER										
L	1	7	5	13	0	19							19	0-1	2									
					1-1½		17	6					23	1½-2	47									
M	3	15	16	34	2-2½		3	15	9	1			28	2½-3	37									
					3-3½			2	10	8			20	3½-4	10									
H	5	12	36	53	4-4½				1	2	2		5	4½-5	2									
					5+				1	1	2	1	5	5+	2									
TOT. FOR K (READ ACROSS)				9	34	57	100	TOT.							19	20	23	21	12	4	1	100	TOT.	100

TERRACES - GRAY, EASTERN OHIO - 504 SAMPLES
(SEBRING - PURDY)

(A) POTASSIUM					(B) pH								(C)											
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER										
L	5	11	7	23	0	12							12	0-1	3									
					1-1½		12	7	1				20	1½-2	47									
M	8	23	22	53	2-2½		2	16	9	3			30	2½-3	43									
					3-3½			2	9	13	1		25	3½-4	5									
H	1	3	20	24	4-4½					3	5		8	4½-5	1									
					5+						2	3	5	5+	1									
TOT. FOR K (READ ACROSS)				14	37	49	100	TOT.							12	14	25	19	19	8	3	100	TOT.	100

TERRACES - LIGHT COLORED, EASTERN OHIO - 1440 SAMPLES
(MENTOR - GLENFORD - HOLSTON - MONOGAHELA - ELK - CAPTINA)

(A) POTASSIUM					(B) pH								(C)											
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER										
L	5	10	7	22	0	16							16	0-1	11									
					1-1½		17	8	2				27	1½-2	72									
M	8	17	18	43	2-2½		1	10	10	3	1		25	2½-3	16									
					3-3½				7	11	2	1	21	3½-4	1									
H	2	9	24	35	4-4½					1	5	1	7	4½-5	0									
					5+					1	1	2	4	5+	0									
TOT. FOR K (READ ACROSS)				15	36	49	100	TOT.							16	18	18	19	16	9	4	100	TOT.	100

BOTTOM SOILS - BLACK, WESTERN OHIO - 936 SAMPLES
(SLOAN - WARASH - ALGIERS)

(A) POTASSIUM					(B) pH								(C)											
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER										
L	2	7	9	18	0	50							50	0-1	0									
					1-1½		17	4					21	1½-2	11									
M	2	12	32	46	2-2½		3	12	4				19	2½-3	42									
					3-3½		1	2	4	1			8	3½-4	25									
H	1	3	32	36	4-4½				1				1	4½-5	11									
					5+					1			1	5+	11									
TOT. FOR K (READ ACROSS)				5	22	73	100	TOT.							50	21	18	9	2	0	0	100	TOT.	100

BOTTOM SOILS - DARK BROWN, WESTERN OHIO - 1408 SAMPLES
(GENESSEE - ROSS - SHOALS - DEFIANCE)

(A) POTASSIUM					(B) pH								(C)											
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER										
L	3	8	7	18	0	47							47	0-1	2									
					1-1½		18	9	1				28	1½-2	40									
M	2	12	28	42	2-2½		1	9	7	1			18	2½-3	46									
					3-3½				2	2			4	3½-4	10									
H	1	6	33	40	4-4½					1	1		2	4½-5	2									
					5+						1		1	5+	0									
TOT. FOR K (READ ACROSS)				6	26	68	100	TOT.							47	19	18	10	4	2	0	100	TOT.	100

BOTTOM SOILS - DARK COLORED, EASTERN OHIO - 1083 SAMPLES
(ELKINS - DUNNING)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	5	9	6	20	0	28							28	0-1	4
M	5	18	20	43	1-1½		19	8	1				28	1½-2	49
H	2	9	26	37	2-2½		3	16	6	1			26	2½-3	33
TOT. FOR K (READ ACROSS)	12	36	52	100	3-3½			2	5	4			11	3½-4	8
					4-4½					1	1		2	4½-5	3
					5+					2	2	1	5	5+	3
					TOT.	28	22	26	12	8	3	1	100	TOT.	100

BOTTOM SOILS - GRAY, EASTERN OHIO - 462 SAMPLES
(WAYLAND - ATKINS - MELVIN)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	6	8	7	21	0	20							20	0-1	4
M	6	21	29	56	1-1½		16	8	1				25	1½-2	47
H	1	3	19	23	2-2½		2	10	11	1			24	2½-3	40
TOT. FOR K (READ ACROSS)	13	32	55	100	3-3½				7	11	2		20	3½-4	7
					4-4½					1	5		6	4½-5	1
					5+					2	3		5	5+	1
					TOT.	20	18	18	19	13	9	3	100	TOT.	100

BOTTOM SOILS - BROWN, EASTERN OHIO - 1623 SAMPLES
(HUNTINGTON - LINSIDE - POPE - PHILO- CHAGRIN - LOBDELL)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	6	12	8	26	0	24							24	0-1	9
M	5	17	21	43	1-1½		19	7	2	1			29	1½-2	66
H	1	6	24	31	2-2½		1	11	9	2			23	2½-3	24
TOT. FOR K (READ ACROSS)	12	35	53	100	3-3½				5	10	2		17	3½-4	1
					4-4½					1	4		5	4½-5	0
					5+						1	1	2	5+	0
					TOT.	24	20	18	16	14	7	1	100	TOT.	100

MUCK AND PEAT SOILS - 340 SAMPLES
(CARLISLE - WILLELME - KERSTON - EDWARDS - WARNER - TAWAS)

(A) POTASSIUM					(B) pH								(C)		
PHOSPHORUS	L	M	H	TOT. FOR P (READ DOWN)	LIME T/A	6.6+	6.5	6.0	5.6	5.2	4.9	4.5 or less	TOT.	% ORGANIC MATTER	
L	8	6	5	19	0	28	11	21	14				74	0-1	0
M	4	14	21	39	1-1½								0	1½-2	0
H	0	7	35	42	2-2½					11			11	2½-3	0
TOT. FOR K (READ ACROSS)	12	27	61	100	3-3½						9		9	3½-4	0
					4-4½							6	6	4½-5	0
					5+								0	5+	100
					TOT.	28	11	21	14	11	9	6	100	TOT.	100

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