

INVENTORY OF AKRON STATION SOILS
FOR ORGANIC MATTER, TOTAL NITROGEN,
AND AVAILABLE PHOSPHORUS -- 1963

Organic Matter Determination: Wet combustion method permanganate modification, assuming valence change of 4 for carbon 58% C in soil organic matter, and 74% soil organic matter oxidized.

Total Nitrogen: Modified Kjeldahl method.

Available Phosphorus: Sodium bicarbonate extraction, Dickman and Bray Procedure.

Depth of Sampling: 0-6 inches and 6-24 inches.

Sampling and Analysis by Wayne Shawcroft and Herb Shafer.

Inventory of Akron Station Soils for Organic Matter, Total Nitrogen, Lime and Available Phosphorus Content.

Shawcroft & Greb, 1963

Code No.	Soil Type	Site 1	Site 2	Site 3	Site 4	Mapping Unit
A	Devona fsl	H&M North	H&M North	H&M North	H&M North	1F-B, 1F-C
B	Ascalon fsl	Harpham	H&M North	H&M South	H&M South	2F-B, 2F-C
C	Colb, l & fsl	Harpham	Forestry	ARS	CSU South	4, 4F
D	Canyon, fsl	Harpham	Harpham	Harpham	Harpham	3
E	Mansker fsl	Harpham	Harpham	Harpham	Harpham	8-F
F	Goshen l	Forestry	Forestry	ARS	CSU South	5
G	Sligo l, cl	Harpham	Forestry	H&M North	H&M South	13-A, 13-B
H	Haxtun fsl	H&M South	H&M South	H&M South	H&M South	6-F, 6D-A
I	Kuma l	Harpham	Forestry	H&M North	H&M North	7-B
J	Platner l	Harpham	Forestry	H&M North	H&M South	9-A, 9-B
K	Rago sl	Forestry	ARS	CSU South	CSU South	10 S-A
L	Rago buried sl	Harpham	H&M South	CSU South	CSU South	10-B
M	Scott l	H&M South	H&M South	H&M South	H&M South	12
N	Stoneham-Weld	Forestry	CSU South	CSU South	CSU South	14F-16B
O	Norka l	Forestry	Forestry	CSU South	CSU South	15B, 15D
P	Weld* sl	Forestry	ARS	ARS	CSU South	16 S-A

Code	Soil Series Location	Depth	Organic Matter Pct.	Total Nitrogen Pct.	C/N Ratio	Available P ₂ O ₅ Lbs./A.
<u>Devona (1F-C, 1F-B)*</u>						
A-1	H&M North	0-6	0.71	0.059		61
		6-24	0.84	0.055		40
A-2	H&M North	0-6	0.92	0.065		56
		6-24	0.90	0.062		13
A-3	H&M North	0-6	1.11	0.077		65
		6-24	0.90	0.070		15
A-4	H&M North	0-6	1.25	0.059		51
		6-24	0.92	0.049		24
Ave.		0-6	1.00	.065	8.9	58
		6-24	.89	.059	8.6	23
<u>Ascalon (2F-B, 2F-C)</u>						
B-1	Harpham	0-6	0.96	0.066		34
		6-24	0.63	0.052		23
B-2	H&M North	0-6	1.21	0.079		29
		6-24	0.69	0.046		13
B-3	H&M South	0-6	1.38	0.081		12
		6-24	0.50	0.033		16
B-4	H&M South	0-6	0.86	0.057		35
		6-24	0.71	0.046		20
Ave.		0-6	1.10	.071	9.0	28
		6-24	.63	.044	8.3	18
<u>Colby (4, 4F)</u>						
C-1	Harpham	0-6	0.93	0.058		10
		6-24	0.58	0.049		7
C-2	Forestry	0-6	0.95	0.060		38
		6-24	0.80	0.059		4
C-3	ARS	0-6	1.32	0.078		11
		6-24	0.53	0.038		22
C-4	CSU South	0-6	1.42	0.078		10
		6-24	0.64	0.030		21
Ave.		0-6	1.16	.069	9.8	17
		6-24	.64	.044	8.4	14
<u>Canyon (3)</u>						
D-1	Harpham	0-6	1.56	0.097		22
		6-24	1.29	0.093		15
D-2	Harpham	0-6	1.73	0.116		23
		6-24	1.15	0.109		7
D-3	Harpham	0-6	1.81	0.111		27
		6-24	1.42	0.093		5
D-4	Harpham	0-6	1.59	0.089		30
		6-24	1.40	0.086		22
Ave		0-6	1.67	.103	9.4	26
		6-24	1.32	.095	8.1	12

Code	Soil Series Location	Depth	Organic Matter Pct.	Total Nitrogen Pct.	C/N Ratio	Available P ₂ O ₅ Lbs./A.
<u>Mansker (8-F)</u>						
E-1	Harpham	0-6	1.65	0.100		32
		6-24	0.92	0.056		26
E-2	Harpham	0-6	2.02	0.126		29
		6-24	1.29	0.076		13
E-3	Harpham	0-6	1.53	0.084		58
		6-24	1.54	0.078		27
E-4	Harpham	0-6	1.56	0.076		55
		6-24	1.29	0.077		23
Ave.		0-6	1.69	.097	10.1	44
		6-24	1.26	.072	10.1	22
<u>Goshen (5)</u>						
F-1	Forestry	0-6	2.57	0.139		229
		6-24	1.64	0.103		357
F-2	Forestry	0-6	1.52	0.111		229
		6-24	1.19	0.079		421
F-3	ARS (Nelson)	0-6	2.23	0.115		165
		6-24	1.54	0.082		116
F-4	CSU South	0-6	2.70	0.130		110
		6-24	1.32	0.073		55
Ave.		0-6	2.27	.124	10.6	183
		6-24	1.42	.084	9.8	237
<u>Sligo (13-A, 13-B)</u>						
G-1	Harpham	0-6	1.18	0.072		69
		6-24	1.14	0.066		27
G-2	Forestry	0-6	1.61	0.094		159
		6-24	1.35	0.081		64
G-3	H&M North	0-6	2.92	0.153		179
		6-24	1.24	0.082		81
G-4	H&M South	0-6	1.39	0.082		92
		6-24	0.95	0.062		21
Ave		0-6	1.78	.100	10.3	125
		6-24	1.17	.073	9.3	48
<u>Haxtun (6-F, 6D-A)</u>						
H-1	H&M South	0-6	1.21	0.085		99
		6-24	1.06	0.059		25
H-2	H&M South	0-6	1.58	0.081		104
		6-24	0.86	0.055		28
H-3	H&M South	0-6	1.69	0.083		91
		6-24	0.77	0.043		22
H-4	H&M South	0-6	1.81	0.087		106
		6-24	0.54	0.046		18
Ave.		0-6	1.57	.084	10.8	100
		6-24	.81	.051	9.2	23

Code	Soil Series Location	Depth	Organic Matter Pct.	Total Nitrogen Pct.	C/N Ratio	Available P ₂ O ₅ Lbs./A.
<u>Kuma (7-B)</u>						
I-1	Harpham	0-6	1.52	0.097		82
		6-24	1.11	0.079		37
I-2	Forestry	0-6	1.16	0.091		96
		6-24	1.03	0.074		30
I-3	H&M North	0-6	1.89	0.119		101
		6-24	1.62	0.116		57
I-4	H&M North	0-6	1.56	0.101		67
		6-24	0.88	0.074		22
Ave.		0-6	1.53	.102	8.7	87
		6-24	1.16	.086	7.8	37
<u>Platner (9-A, 9-B)</u>						
J-1	Harpham	0-6	1.16	0.074		58
		6-24	0.74	0.055		29
J-2	Forestry	0-6	0.76	0.049		71
		6-24	0.81	0.050		22
J-3	H&M North	0-6	1.53	0.081		92
		6-24	1.01	0.058		34
J-4	H&M South	0-6	0.97	0.060		37
		6-24	0.83	0.048		12
Ave.		0-6	1.11	.066	9.7	65
		6-24	.85	.053	9.2	24
<u>Rago (10S-A)</u>						
K-1	Forestry	0-6	1.84	0.105		48
		6-24	1.14	0.076		15
K-2	ARS	0-6	1.02	0.065		51
		6-24	1.11	0.077		30
K-3	CSU South	0-6	2.11	0.121		34
		6-24	1.27	0.082		19
K-4	CSU South	0-6	2.05	0.132		42
		6-24	1.67	0.086		29
Ave.		0-6	1.76	.106	9.6	44
		6-24	1.29	.080	9.4	23
<u>Rago (buried phase) (10-B)</u>						
L-1	Harpham	0-6	0.98	0.056		37
		6-24	0.79	0.048		41
L-2	H&M South	0-6	1.36	0.082		89
		6-24	1.09	0.065		39
L-3	CSU South	0-6	1.81	0.107		195
		6-24	1.16	0.076		59
L-4	CSU South	0-6	2.08	0.122		115
		6-24	1.98	0.092		50
Ave.		0-6	1.56	.092	9.0	90
		6-24	1.26	.070	10.4	47

Code	Soil Series Location	Depth	Organic Matter Pct.	Total Nitrogen Pct.	C/N Ratio	Available P ₂ O ₅ Lbs./A.
<u>Scott (12)</u>						
M-1	H&M South	0-6	1.38	0.064		194
		6-24	0.59	0.032		110
M-2	H&M South	0-6	1.57	0.094		224
		6-24	1.02	0.054		110
M-3	H&M South	0-6	1.06	0.046		112
		6-24	0.75	0.043		164
M-4	H&M South	0-6	1.50	0.102		213
		6-24	0.81	0.069		172
Ave.		0-6	1.38	.076	10.5	186
		6-24	.79	.050	9.2	139
<u>Stoneham-Weld (14F-16B)</u>						
N-1	Forestry	0-6	0.85	0.065		34
		6-24	0.78	0.066		16
N-2	CSU South	0-6	1.48	0.088		15
		6-24	0.85	0.070		17
N-3	CSU South	0-6	1.91	0.103		20
		6-24	0.72	0.047		6
N-4	CSU South	0-6	1.24	0.083		26
		6-24	0.88	0.070		9
Ave.		0-6	1.37	.085	9.4	24
		6-24	.81	.063	7.5	12
<u>Norka (15B, 15D)</u>						
0-6	Forestry	0-6	1.09	0.088		24
		6-24	0.63	0.063		5
0-2	Forestry	0-6	2.12	0.096		29
		6-24	1.16	0.062		12
0-3	CSU South	0-6	1.68	0.093		22
		6-24	0.90	0.053		7
0-4	CSU South	0-6	1.45	0.076		7
		6-24	0.95	0.052		11
Ave.		0-6	1.59	.088	10.5	21
		6-24	.91	.058	9.1	9
<u>Weld (16S-A)</u>						
P-1	Forestry	0-6	1.05	0.065		50
		6-24	0.57	0.038		26
P-2	ARS	0-6	1.26	0.076		44
		6-24	1.03	0.059		13
P-3	ARS	0-6	1.22	0.077		110
		6-24	1.00	0.054		41
P-4	CSU South	0-6	2.00	0.130		26
		6-24	1.37	0.074		15
Ave.		0-6	1.38	.087	9.2	58
		6-24	.99	.056	10.3	24

Summary of Soil Analysis of Station
Soils, 1963

Soil Series	Soil Depth Inches	Organic Matter %	Total Nitrogen %	C/N Ratio	Available P ₂ O ₅ Lbs./A.
Devona	0-6	1.00	.065	8.9	58
	6-24	.89	.059	8.6	23
Ascalon	0-6	1.10	.071	9.0	28
	6-24	.63	.044	8.3	18
Colby	0-6	1.16	.069	9.8	17
	6-24	.64	.044	8.4	14
Canyon	0-6	1.67	.103	9.4	26
	6-24	1.32	.095	8.1	12
Mansker	0-6	1.69	.097	10.1	44
	6-24	1.26	.072	10.1	22
Goshen	0-6	2.27	.124	10.6	183
	6-24	1.42	.084	9.8	237
Sligo	0-6	1.78	.100	10.3	125
	6-24	1.17	.073	9.3	48
Haxtun	0-6	1.57	.084	10.8	100
	6-24	.81	.051	9.2	23
Kuma	0-6	1.53	.102	8.7	87
	6-24	1.16	.086	7.8	37
Platner	0-6	1.11	.066	9.7	65
	6-24	.85	.053	9.2	24
Rago	0-6	1.76	.106	9.6	44
	6-24	1.29	.080	9.4	23
Rago (buried)	0-6	1.56	.092	9.0	90
	6-24	1.26	.070	10.4	47
Scott	0-6	1.38	.076	10.5	186
	6-24	.79	.050	9.2	139
Stoneham-Weld	0-6	1.37	.085	9.4	24
	6-24	.81	.063	7.5	12
Norka	0-6	1.59	.088	10.5	21
	6-24	.91	.058	9.1	9
Weld	0-6	1.38	.087	9.2	58
	6-24	.99	.056	10.3	24
Grand Ave.	0-6	1.50	.088	9.9	72
All Soils	6-24	1.01	.065	8.9	45