

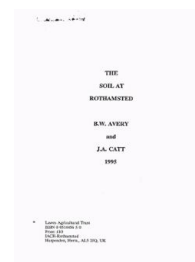
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Appendix B: Analytical Data

Rothamsted Research

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Appendix B: Analytical Data

Profile No.	Depth (cm)	Sand 60 μ m-2mm %	Silt 2-60 μ m %	Clay <2 μ m %	Loss on ignition %	Organic carbon %	CaCO ₃ equiv. %	Extr. Fe ₂ O ₃ %	pH (H ₂ O)	pH (CaCl ₂)
1	0-20	19	58	23	7.7		0.0		4.9	
	20-45	19	57	24	4.4		0.0		5.3	
	45-69	16	50	34	4.7		0.0		5.4	
	69-90	8	53	39	4.8		0.0		5.8	
2	0-18	15	59	26	8.2		0.0		4.8	
	18-30	15	56	29	6.0		0.0		4.9	
	30-60	5	32	63	4.5		0.0		5.6	
3	0-20	28	52	20	6.4		0.1		7.1	
	20-38	22	52	26	3.9		0.2		7.5	
	38-90	14	34	52	6.4		0.0		7.5	
4	0-20	21	51	28	7.4		1.9		7.6	
	20-51	16	62	22	3.7		0.2		7.9	
5	2-10	13	57	30	13.4		0.0		4.9	4.2
	10-23	17	40	43	7.7		0.0		5.6	5.2
	23-38	17	20	63	8.9		0.0		4.9	4.3
	38-66	10	11	79	10.2		0.0		5.0	4.4
	66-76	<1	14	86	11.6		0.0		6.5	6.0
6	2-10	4	54	42	15.0	4.9	5.2		7.8	7.4
	10-23	11	44	45	10.9	2.6	3.4		7.8	7.4
7	2-13	10	66	24	5.8	3.1	0.0		4.5	3.9
	13-30	10	61	29	5.8	1.1	0.0		4.7	4.1
	30-56	10	56	34	4.9	0.5	0.0		5.0	4.6
8	0-10	14	60	26	14.6	5.6	6.6		7.5	7.2
	10-36	17	53	30	7.6	1.9	8.2		7.9	7.4
	36-61	13	51	36	4.6	0.9	39.7		8.0	7.4
9	2-10	15	59	26	9.8	3.6	0.0		6.5	6.1
	10-25	12	58	30	6.0	1.3	0.0		6.4	6.0
	25-51	13	44	43	5.9	0.8	0.0		6.6	6.1
10	2-10	22	52	26	10.2	3.6	2.3		7.0	6.7
	18-25	17	52	31	6.0	1.0	5.8		7.6	7.3
	33-41	18	58	24	4.5	1.2	0.7		7.7	7.3
	46-56	17	28	55	7.0	0.7	0.2		7.5	7.0
	76-91	9	25	66	8.5	0.5	0.1		7.4	7.0
11	2-13	19	54	27	10.4	3.4	1.6		7.5	7.2
	15-25	17	56	27	5.8	1.3	4.9		7.9	7.6
	30-41	11	42	47	6.7	0.6	0.5		7.5	7.2
	76-90	13	25	62	8.3	0.7	0.1		7.5	7.0
12	0-13	15	70	15	8.8		0.0		5.6	5.5
	20-70	19	65	16	3.8		0.0		6.1	5.9
	80-110	10	70	20	3.3		0.0		6.2	5.8
	120-160	12	56	32	4.4		0.0		6.5	6.2
13	1-6	5	72	23	11.3		0.6		6.9	6.5
	8-20	8	70	22	8.2		0.0		6.0	5.5
	22-30	7	67	26	5.1		0.0		5.4	4.6
	38-62	4	45	51	7.0		0.0		5.7	5.0
	67-92	4	41	55	7.2		0.0		6.2	5.6
	100-125	4	35	61	7.9		0.0		6.4	5.7

Profile No.	Depth cm	Sand 60 μ m-2mm %	Silt 2-60 μ m %	Clay <2 μ m %	Loss on ignition %	Organic carbon %	CaCO ₃ equiv. %	Extr. Fe ₂ O ₃ %	pH (H ₂ O)	pH (CaCl ₂)	
14	2-10	12	69	19	10.9	4.5	0.0		5.5	4.7	
	15-38	17	65	18	4.6		0.0		5.1	4.4	
	46-53	18	66	16	3.6		0.0		5.4	4.7	
	61-76	24	64	12	3.2		0.0		6.0	5.2	
15	2-15	9	70	21	7.2	2.3	0.0		5.7	5.0	
	20-36	8	71	21	4.5		0.0		6.0	5.1	
	41-58	6	67	27	4.0		0.0		6.3	5.4	
	74-89	3	62	35	4.6		0.0		6.5	5.9	
16	2-8	21	61	18	11.8	5.1	0.1		6.7	5.9	
	13-23	22	61	17	7.6		2.5		7.8	7.1	
	51-66	32	56	12	2.7		tr.		7.7	6.9	
	84-91	10	53	37	4.5		0.1		7.8	7.1	
17	1-8	13	62	25	22.1	9.9	0.0		6.1	5.4	
	13-23	18	57	25	13.9		0.0		6.1	5.2	
	28-38	19	58	23	12.9		0.0		6.4	5.4	
18	2-23	12	58	30	8.4	2.4	1.3		7.6	7.0	
	28-38	9	62	29	5.0		0.4		7.7	6.9	
	38-51	7	58	35	5.4		0.4		7.8	7.1	
	61-81	7	62	31			80.2		8.2	7.4	
19	0-20	15	57	28	5.1	1.0	1.3		8.1	7.4	
	20-51	5	40	55	7.2		0.5	0.0	7.8	7.2	
	51-94	7	34	59	7.2		0.3	0.0	7.6	7.0	
20	0-20	8	68	24	4.2		1.5	2.6	8.1	7.6	
	20-51	3	40	57	7.2		tr.	5.2	7.8	7.2	
	51-96	9	20	71	8.3		0.0	6.5	7.5	7.0	
	96-142	8	22	70	7.3		0.0	5.6	7.4	6.8	
21	0-18	18	57	25	4.4	0.9	0.3	3.2	7.9	7.3	
	18-48	12	51	37	5.2		0.5	0.0	4.1	7.6	7.0
	48-71	29	21	50	6.2		0.3	0.0	4.4	7.6	7.0
	71-102	27	30	43	5.3		0.0	0.0	4.4	7.6	7.0
	102-152	30	35	35	3.9		0.0	0.0	4.0	7.5	6.9
22	0-23	16	65	19	4.6	0.6	0.3	2.2	8.1	7.6	
	23-41	10	65	25	3.8		0.4	0.2	2.9	8.0	7.5
	41-66	3	58	39	4.9		0.4	tr.	2.9	7.9	7.3
	66-94	5	55	40	4.9		tr.	tr.	3.2	7.9	7.3
	94-117	10	54	36	4.8		tr.	tr.	4.9	7.9	7.4
23	0-25	14	65	21	5.0	1.2	0.0		5.7	4.8	
	25-41	14	65	21	3.8		0.6	0.0	6.3	5.7	
	41-53	10	65	25	3.9		0.5	0.0	6.6	6.1	
	53-71	5	63	32	4.3		0.0	0.0	6.9	6.2	
	71-91	5	57	38	5.1		0.0	0.0	7.1	6.4	
24	0-15	13	53	34		0.9	0.8	4.2	8.1	7.5	
	18-35	4	38	58			0.6	0.1	5.4	7.4	7.1
	35-55	5	30	65			0.4	0.0	5.7	7.3	7.0
	55-90	6	20	74			0.3	0.0	6.7	7.2	6.9
25	0-15	16	62	22		0.7	1.5	3.2	8.2	7.6	
	15-30	14	62	24			0.6	1.0	3.3	8.2	7.5
	30-41	12	60	28			0.5	tr.	3.8	7.7	7.2
	41-70	8	34	58			0.5	0.0	5.7	7.3	7.0
	70-90	8	33	59			0.4	0.0	5.9	7.4	6.9

Profile No.	Depth cm	Sand 60 μ m-2mm %	Silt 2-60 μ m %	Clay <2 μ m %	Loss on ignition %	Organic carbon %	CaCO ₃ equiv. %	Extr. Fe ₂ O ₃ %	pH (H ₂ O)	pH (CaCl ₂)
26	0-15	13	52	35		0.6	0.9	3.8	8.2	7.5
	20-35	3	32	65		0.4	tr.	5.6	7.5	7.1
	35-55	5	35	60		0.4	0.0	5.6	7.2	6.9
	55-70	19	22	59		0.2	0.0	6.2	7.2	6.9
	70-90	29	18	53		0.1	0.0	5.7	7.2	6.9
27	0-15	17	61	22		0.8	1.8	3.4	8.2	7.7
	15-25	17	60	23		0.7	2.0	3.0	8.2	7.6
	25-50	11	64	25		0.5	0.0	3.0	8.0	7.4
	50-70	33	51	16		0.2	0.0	5.7	7.8	7.2
	70-90	14	51	35		0.2	0.0	3.6	7.5	7.1
28	0-25	15	65	20		1.9	0.0		6.4	5.7
	25-52	12	64	24		1.3	0.0		6.5	5.8
	52-90	11	62	27			0.0		7.0	6.4
29	0-25	9	62	29		2.2	4.3		8.0	7.4
	25-49	6	57	37		0.8	0.6		8.1	7.4
	49-90	9	63	28			36		8.3	7.6
30	0-20	21	44	35		1.7	2.2		7.8	7.3
	20-43	19	20	61		0.9	tr.		7.9	7.3
	43-67	19	12	69		0.8	tr.		8.0	7.4
31	0-18	19	62	19		1.4	0.0		7.2	6.6
	18-38	13	61	26		0.7	0.0		7.4	6.8
	38-68	12	60	28		0.6	0.0		7.5	6.9
	68-90	10	64	26		0.5	0.0		7.8	7.1
32	0-20	14	64	22		1.5	tr.		7.2	6.5
	20-40	10	66	24			0.0		7.0	6.2
	40-65	4	64	32			0.0		7.0	6.4
	65-91	5	60	35			0.0		7.3	6.7
	91-136	3	61	36			0.0		7.7	6.9
	136-182	3	58	39			0.0		7.4	6.8
33	0-18	14	65	21		1.5	0.0		7.0	6.5
	18-37	10	67	23			0.0		7.1	6.2
	37-55	10	66	24			0.0		7.0	6.3
	55-80	4	61	35			0.0		7.2	6.5
	90-120	7	61	32			0.0		7.3	6.6
	150-180	5	64	31			0.0		7.1	6.3
34	0-27	20	59	21		2.0	0.5	2.7	7.8	7.3
	38-70	14	59	27		0.5	0.0	3.6	7.9	7.1
	70-110	9	36	55			0.0	6.0	7.8	7.1
	110-130	10	37	53		0.3	0.0	5.9	8.0	7.2
35	0-25	21	59	20		2.8	<1	2.9	7.0	6.4
	25-40	19	62	19		1.0	0.0	2.8	5.9	5.1
	50-72	10	58	32			0.0	3.7	5.8	5.0
	72-95	10	40	50			0.0	6.0	6.4	5.8
	95-120	18	44	38			0.0	5.2	6.6	6.0
36	0-10	12	69	19		3.6	<1	2.0	6.9	6.4
	10-25	15	66	19		1.7	0.0	2.2	6.7	6.1
	25-40	10	67	23			0.0	2.2	6.4	5.6
	40-77	6	65	29		0.6	0.0	2.9	6.1	5.2
	77-105	9	58	33			0.0	3.4	6.5	5.7
	105-145	1	63	36		0.2	0.0	3.2	6.6	5.8

Profile No.	Depth cm	Sand 60 μ m-2mm %	Silt 2-60 μ m %	Clay <2 μ m %	Loss on ignition %	Organic carbon %	CaCO ₃ equiv. %	Extr. Fe ₂ O ₃ %	pH (H ₂ O)	pH (CaCl ₂)
37	0-18	33	50	17		6.5	0.0	1.3	6.4	6.1
	18-36	20	62	18		2.3	0.0	0.3	6.7	6.0
	36-58	15	64	21		0.8	0.0	0.7	6.8	5.9
	58-95	53	27	20		0.4	0.0	1.4	7.0	6.2
	95-110	41	39	20		0.4	0.0	4.0	7.5	6.8
38	0-15	39	39	22		6.3	0.0		6.4	6.0
	15-32	40	41	19		4.5	0.0		5.6	4.8
39	0-13	12	61	27		8.9	8.8		7.5	7.1
	13-25	13	61	26		5.1	8.8		7.9	7.3
	37-55	71	18	11						
40	5-15	14	65	21		2.8	0.0	2.2	4.1	3.6
	15-30	15	64	21		1.4	0.0	2.3	4.3	3.8
	30-50	9	63	28		0.5	0.0	2.7	4.5	4.0
	50-90	8	42	50		0.6	0.0	4.7	5.0	4.4
	90-100	14	47	39		0.8	41	2.8	7.3	7.1
41	0-24	13	66	21		1.5	0.4	2.4	7.1	6.7
	24-40	5	65	30		0.6	0.0	2.8	6.6	6.1
	40-65	3	61	36		0.3	0.0	3.4	7.2	6.8
	65-105	7	54	39		0.4	0.0	4.3	7.2	6.6
	105-110	10	45	45		0.4	0.0	5.0	7.3	6.9
42	0-20	18	60	22		1.5	0.3	3.1	7.3	6.9
	20-40	12	55	33		0.6	0.0	4.1	7.4	6.9
	40-120	16	30	54		0.3	0.0	5.8	7.5	7.0

tr = trace

gaps indicate not determined