

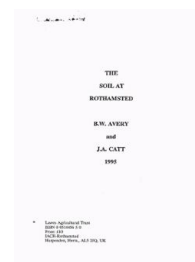
Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

## The Soil at Rothamsted

[Full Table of Content](#)



---

### Appendix B: Analytical Data

#### Rothamsted Research

Rothamsted Research (1995) *Appendix B: Analytical Data* ; The Soil At Rothamsted, pp 37 - 40 -  
DOI: <https://doi.org/10.23637/ERADOC-1-143>

Appendix B: Analytical Data

Profile No.	Depth (cm)	Sand 60 $\mu$ m-2mm %	Silt 2-60 $\mu$ m %	Clay <2 $\mu$ m %	Loss on ignition %	Organic carbon %	CaCO <sub>3</sub> equiv. %	Extr. Fe <sub>2</sub> O <sub>3</sub> %	pH (H <sub>2</sub> O)	pH (CaCl <sub>2</sub> )
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 $\mu$ m-2mm %	Silt 2-60 $\mu$ m %	Clay <2 $\mu$ m %	Loss on ignition %	Organic carbon %	CaCO <sub>3</sub> equiv. %	Extr. Fe <sub>2</sub> O <sub>3</sub> %	pH (H <sub>2</sub> O)	pH (CaCl <sub>2</sub> )	
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 $\mu$ m-2mm %	Silt 2-60 $\mu$ m %	Clay <2 $\mu$ m %	Loss on ignition %	Organic carbon %	CaCO <sub>3</sub> equiv. %	Extr. Fe <sub>2</sub> O <sub>3</sub> %	pH (H <sub>2</sub> O)	pH (CaCl <sub>2</sub> )
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 $\mu$ m-2mm %	Silt 2-60 $\mu$ m %	Clay <2 $\mu$ m %	Loss on ignition %	Organic carbon %	CaCO <sub>3</sub> equiv. %	Extr. Fe <sub>2</sub> O <sub>3</sub> %	pH (H <sub>2</sub> O)	pH (CaCl <sub>2</sub> )
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