

pH (CaCl<sub>2</sub>)

## CONTROL patch

Depth	HARJI		JENNIE		ALLAN	
	pH before	pH after	pH before	pH after	pH before	pH after
5	5.2	5.5	4.2	4.2	4.4	4.4
10	5.1	5.4	4.4	4.4	4.4	4.5
15	5.1	5.3	4.4	4.4	4.5	4.5
20	5.2	5.3	4.4	4.5	4.7	4.5

## GOOD patch

Depth	HARJI		JENNIE		ALLAN	
	pH before	pH after	pH before	pH after	pH before	pH after
5	5.6	5.0	4.5	4.5	5.0	5.2
10	5.1	4.9	4.4	4.4	4.7	5.0
15	4.9	4.9	4.4	4.4	4.7	4.7
20	5.0	4.8	4.4	4.5	4.8	4.6

Change in pH<sup>1</sup>

HARJI						
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3
5	0.3	-0.6	1.3	1.5	-0.1	-0.2
10	0.3	-0.2	0.4	0.4	-0.2	-0.5
15	0.2	0	0.3	0.2	-0.1	-0.2
20	0.1	-0.2	0.1	0	0	0.1

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	0	0	1.2	1.3	1	1.9	0.2
10	0	0	0.1	0.1	0.2	0.3	0.1
15	0	0	0	0.1	0.2	0.2	0.1
20	0.1	0.1	0.1	0.1	0.2	0.1	0.2

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	0	0.2	1.3	0.7	1.5
10	0.1	0.3	0.4	0.1	0.7
15	0	0	0.3	0.1	0.3
20	-0.2	-0.2	0.2	-0.1	0.2

<sup>1</sup> For all treatments (except GOOD), the change is the difference between the test value for the treatment at the end of the trial and the test value for the CONTROL at the start of the trial. For GOOD, the change is the difference in the test value of the GOOD patch at the end and start of the trial.

## Electrical conductivity (EC)

(dS/m)

## CONTROL patch

Depth	HARJI		JENNIE		ALLAN	
	EC before	EC after	EC before	EC after	EC before	EC after
5	0.04	0.06	0.11	0.05	0.08	0.05
10	0.04	0.05	0.05	0.03	0.04	0.03
15	0.03	0.04	0.03	0.03	0.03	0.02
20	0.03	0.04	0.02	0.03	0.03	0.02

## GOOD patch

Depth	HARJI		JENNIE		ALLAN	
	EC before	EC after	EC before	EC after	EC before	EC after
5	0.07	0.08	0.08	0.07	0.12	0.08
10	0.05	0.07	0.04	0.04	0.06	0.07
15	0.04	0.04	0.03	0.03	0.03	0.03
20	0.04	0.03	0.03	0.03	0.02	0.03

## Change in EC

HARJI						
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3
5	0.02	0.01	0.06	0.07	0.01	0.04
10	0.01	0.02	0.02	0.02	0	0.01
15	0.01	0	0.01	0	0	0
20	0.01	-0.01	0.01	0	0	0

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	-0.06	-0.01	-0.03	0	-0.04	0.03	-0.05
10	-0.02	0	-0.01	-0.01	0	-0.01	-0.01
15	0	0	0	0	0.2	0	0.19
20	0.01	0	0.01	0.01	0.03	0.01	0.01

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	-0.03	-0.04	0.03	-0.03	0.03
10	-0.01	0.01	0	-0.01	0.01
15	-0.01	0	0	0	0
20	-0.01	0.01	0	0	0

## Phosphorus (P)

(mg/kg)

### CONTROL patch

Depth	HARJI		JENNIE		ALLAN	
	P before	P after	P before	P after	P before	P after
5	4.9	8.6	39	18	5.3	7.7
10	4.9	6.5	9.6	7.4	4.9	4.9

### GOOD patch

Depth	HARJI		JENNIE		ALLAN	
	P before	P after	P before	P after	P before	P after
5	8.3	45	26	16	15	11
10	6.2	19	10	6	5.8	6.4

### Change in P

HARJI						
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3
5	3.7	36.7	105.1	165.1	6.1	8.1
10	1.6	12.8	3.3	12.1	2.9	1.6

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	-21	-10	27	35	-9	-21	-27
10	-2.2	-4	-0.4	3.4	-0.7	-1.8	-3.6

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	2.4	-4	94.7	14.7	104.7
10	0	0.6	7.1	0	13.1

## Aluminium (Al)

(cmol+)/kg)

## CONTROL patch

Depth	HARJI				JENNIE				ALLAN			
	Al before		Al after		Al before		Al after		Al before		Al after	
5	0.09	1.8%	0.09	1.6%	1.4	25%	1.2	26%	0.77	20%	0.81	18%
10	0.09	2.1%	0.09	1.8%	1.3	26%	1.1	29%	0.88	28%	0.8	25%
15	0.09	3.1%	0.09	2%	1.4	35%	1.2	32%	0.63	22%	0.77	32%
20	0.09	3.0%	0.11	2.6%	1.6	38%	1.3	31%	0.43	15%	0.71	32%

## GOOD patch

Depth	HARJI				JENNIE				ALLAN			
	Al before		Al after		Al before		Al after		Al before		Al after	
5	0.09	1.7%	0.12	2.3%	0.69	9.6%	0.68	12%	0.1	1.1%	0.09	1.1%
10	0.09	2%	0.12	2.7%	1.0	23%	1.1	30%	0.57	11%	0.24	3.6%
15	0.09	2.4%	0.16	4.4%	0.96	34%	1.1	35%	0.57	18%	0.63	19%
20	0.11	2.4%	0.21	4.1%	1.2	44%	1.0	36%	0.46	15%	0.64	21%

## Change in Al

HARJI							
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3	
5	0	0.03	0	0	0.01	0.03	
10	0	0.03	0	0	0.04	0.17	
15	0	0.07	0	0	0.05	0.07	
20	0.02	0.1	0	0.04	0	0	

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	-0.2	-0.01	-1.31	-1.31	-1.24	-1.31	-0.52
10	-0.2	0.1	-0.37	-0.4	-0.48	-0.59	-0.4
15	-0.2	0.14	-0.3	-0.4	-0.54	-0.47	-0.53
20	-0.3	-0.2	-0.4	-0.4	-0.7	-0.5	-0.68

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	0.04	-0.01	-0.68	-0.68	-0.68
10	-0.08	-0.33	-0.52	-0.1	-0.68
15	0.14	0.06	-0.22	0.04	-0.2
20	0.28	0.18	-0.13	0.23	-0.13

## Calcium (Ca)

(cmol+)/kg)

## CONTROL patch

Depth	HARJI		JENNIE		ALLAN	
	Ca before	Ca after	Ca before	Ca after	Ca before	Ca after
5	3.2	4.1	2.5	2.0	1.1	1.9
10	3.0	3.6	1.8	1.3	0.65	0.95
15	1.9	3.0	1.0	0.9	0.31	0.5
20	1.7	2.4	0.7	0.7	0.17	0.35

## GOOD patch

Depth	HARJI		JENNIE		ALLAN	
	Ca before	Ca after	Ca before	Ca after	Ca before	Ca after
5	3.6	3.1	4.0	3.1	6.0	5.5
10	3.1	2.6	1.9	1.5	2.4	3.4
15	2.4	1.8	1.0	0.95	1.0	0.85
20	2.3	2.1	0.75	0.65	0.65	0.44

## Change in Ca

HARJI						
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3
5	0.9	-0.5	9.8	12.8	-0.3	-0.6
10	0.6	-0.5	0.5	0.1	-0.6	-1.2
15	1.1	-0.6	0.6	-0.3	-0.2	-0.4
20	0.7	-0.2	0.9	-0.5	0.2	0.7

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	-0.5	-0.9	7.5	9.5	2.4	7	0
10	-0.5	-0.4	-0.3	0.6	-0.4	0.5	-0.4
15	-0.1	-0.05	-0.05	0.3	-0.1	0.1	-0.15
20	0	-0.1	0	0.2	0	0	0.1

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	0.8	-0.5	9.9	4.9	9.9
10	0.3	1	0.75	0.45	1.75
15	0.19	-0.15	0.24	0.17	0.34
20	0.18	-0.21	0.12	0.11	0.18

## Potassium (K)

(cmol+)/kg

## CONTROL patch

Depth	HARJI		JENNIE		ALLAN	
	K before	K after	K before	K after	K before	K after
5	0.46	0.49	0.22	0.17	0.17	0.31
10	0.36	0.36	0.11	0.087	0.12	0.18
15	0.21	0.23	0.074	0.067	0.09	0.15
20	0.2	0.21	0.084	0.069	0.095	0.13

## GOOD patch

Depth	HARJI		JENNIE		ALLAN	
	K before	K after	K before	K after	K before	K after
5	0.95	0.69	0.33	0.18	0.54	0.44
10	0.54	0.51	0.22	0.092	0.26	0.31
15	0.31	0.33	0.14	0.087	0.19	0.16
20	0.31	0.36	0.13	0.079	0.28	0.13

## Change in K

HARJI						
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3
5	0.03	-0.26	0.41	0.44	0	0.28
10	0	-0.03	0.31	0.33	-0.05	0.05
15	0.02	0.02	0.23	0.17	0.03	0.01
20	0.01	0.05	0.24	0.06	0.02	0.11

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	-0.05	-0.15	0.16	0.16	-0.07	0.06	0.11
10	-0.023	-0.128	0.05	0.09	-0.023	0.04	0.04
15	-0.007	-0.053	0.036	0.046	-0.007	0.046	0.023
20	-0.015	-0.051	0.011	0.016	-0.02	0.006	0.013

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	0.14	-0.1	0.21	0.19	0.47
10	0.06	0.05	0.1	0.1	0.21
15	0.06	-0.03	0.05	0.06	0.1
20	0.035	-0.15	0.045	0.055	0.065

## Magnesium (Mg)

(cmol+)/kg

## CONTROL patch

Depth	HARJI		JENNIE		ALLAN	
	Mg before	Mg after	Mg before	Mg after	Mg before	Mg after
5	1.5	1.6	1.3	1.2	1.6	1.4
10	1.2	1.6	1.6	1.2	1.4	1.2
15	0.91	1.5	1.4	1.4	1.7	0.91
20	1.2	1.4	1.6	2.0	1.9	0.99

## GOOD patch

Depth	HARJI		JENNIE		ALLAN	
	Mg before	Mg after	Mg before	Mg after	Mg before	Mg after
5	1.2	1.2	2.1	1.6	2.5	3.2
10	1.1	1.1	1.1	0.99	1.7	2.6
15	1.2	1.2	0.64	0.91	1.4	1.6
20	1.7	2.3	0.62	0.99	1.6	1.6

## Change in Mg

HARJI						
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3
5	0.1	0	1.6	2.2	-0.59	-0.59
10	0.4	0	0	-0.21	-0.38	-0.57
15	0.59	0	0.39	-0.17	0.08	0
20	0.2	0.6	1	-0.29	0.1	1.1

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	-0.1	-0.5	0.8	1.1	-0.31	0.1	0.4
10	-0.4	-0.11	-0.4	0	-0.5	-0.2	0
15	0	0.27	-0.1	0	-0.2	0.1	0
20	0.4	0.37	0	-0.2	-0.2	0.4	0.3

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	-0.2	0.7	1.8	-0.1	2.3
10	-0.2	0.9	0.9	0	1.2
15	-0.79	0.2	0.9	-0.5	1.4
20	-0.91	0	1.7	-0.5	2.1

## Sodium (Na)

(cmol+)/kg)

## CONTROL patch

Depth	HARJI				JENNIE				ALLAN			
	Na before		Na after		Na before		Na after		Na before		Na after	
5	0.48	8.4%	0.048	0.76%	0.1	1.8%	0.083	1.8%	0.21	5.4%	0.04	0.89%
10	0.065	1.4%	0.074	1.3%	0.15	3%	0.1	2.6%	0.13	4.1%	0.042	1.3%
15	0.061	1.9%	0.1	2%	0.14	3.5%	0.13	3.5%	0.13	4.5%	0.048	2%
20	0.1	3%	0.11	2.6%	0.17	4%	0.17	4%	0.17	6.1%	0.065	3%

## GOOD patch

Depth	HARJI				JENNIE				ALLAN			
	Na before		Na after		Na before		Na after		Na before		Na after	
5	0.11	1.8%	0.1	1.9%	0.1	1.4%	0.087	1.6%	0.14	1.5%	0.2	2.1%
10	0.061	1.2%	0.074	1.7%	0.065	1.5%	0.061	1.6%	0.074	1.5%	0.17	2.5%
15	0.048	1.2%	0.065	1.8%	0.039	1.4%	0.07	2.3%	0.061	1.9%	0.14	4.1%
20	0.07	1.6%	0.12	2.4%	0.044	1.6%	0.078	2.8%	0.087	2.8%	0.17	5.7%

## Change in Na

HARJI							
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3	
5	-0.432	-0.01	-0.438	-0.44	-0.415	-0.402	
10	0.009	0.013	-0.017	-0.032	0	-0.017	
15	0.039	0.017	-0.004	-0.024	0.004	-0.013	
20	0.01	0.05	0.02	-0.043	-0.009	0.01	

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	-0.017	-0.013	-0.026	-0.048	0.02	0	0.01
10	-0.05	-0.004	-0.089	-0.089	-0.05	-0.04	-0.04
15	-0.01	0.031	-0.044	-0.057	-0.01	-0.01	-0.03
20	0	0.034	-0.03	-0.06	0	0.02	-0.02

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	-0.17	0.06	0.04	-0.127	0.02
10	-0.088	0.096	0.07	-0.01	0.04
15	-0.082	0.079	0.11	0.05	0.09
20	-0.105	0.083	0.1	0	0.08



## Cation exchange capacity (CEC)

(cmol+)/kg)

## CONTROL patch

Depth	HARJI		JENNIE		ALLAN	
	CEC before	CEC after	CEC before	CEC after	CEC before	CEC after
5	5.7	6.3	5.5	4.7	3.9	4.5
10	4.7	5.7	5.0	3.8	3.2	3.2
15	3.2	4.9	4.0	3.7	2.9	2.4
20	3.3	4.2	4.2	4.2	2.8	2.2

## GOOD patch

Depth	HARJI		JENNIE		ALLAN	
	CEC before	CEC after	CEC before	CEC after	CEC before	CEC after
5	6.0	5.2	7.2	5.6	9.3	9.4
10	4.9	4.4	4.3	3.7	5.0	6.7
15	4.1	3.6	2.8	3.1	3.2	3.4
20	4.5	5.1	2.7	2.8	9.3	9.4

## Change in CEC

HARJI							
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3	
5	0.6	-0.8	11.3	15.3	-1.3	-1.3	
10	1	-0.5	0.8	0.2	-1	-1.6	
15	1.7	-0.5	1.2	-0.3	-0.1	-0.4	
20	0.9	0.6	2.2	-0.7	0.3	1.9	

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	-0.8	-1.6	7.5	9.5	0.8	5.5	0
10	-1.2	-0.6	-1.1	0.2	-1.5	-0.3	-0.8
15	-0.3	0.3	-0.4	-0.1	-0.8	-0.2	-0.7
20	0	0.1	-0.5	-0.5	-1	-0.1	-0.3

ALLAN						
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM	
5	0.6	0.1	11.1	4.1	12.1	
10	0	1.7	1.3	0.4	2.5	
15	-0.5	0.2	1	-0.2	1.7	
20	-0.6	-0.1	1.8	-0.1	2.3	

## Total organic carbon (OC) (%)

### CONTROL patch

Depth	HARJI		JENNIE		ALLAN	
	OC before	OC after	OC before	OC after	OC before	OC after
5	1.6	1.98	4.18	4.24	2.22	3.64
10	1.35	1.4	1.98	1.63	1.42	1.94

### GOOD patch

Depth	HARJI		JENNIE		ALLAN	
	OC before	OC after	OC before	OC after	OC before	OC after
5	1.6	1.98	4.95	4.79	5.86	4.97
10	1.35	1.4	2.41	2.03	3.5	2.89

### Change in OC

HARJI						
Depth	CONTROL	GOOD	COMMON	CMPST.GM	CMPST.TEA	VARIATION.3
5	0.38	-0.2	2.48	3.29	-0.13	0.45
10	0.05	-0.39	0.05	0.09	-0.41	-0.09

JENNIE							
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	LIME.SUPER	RIP.LIME.GM	BURN
5	0.06	-0.16	0.59	1.32	-1.18	-0.2	-0.47
10	-0.35	-0.38	-0.27	0.19	-0.36	0.02	-0.14

ALLAN					
Depth	CONTROL	GOOD	COMMON	CMPST.LIME.GM	RIP.CMPST.LIME.GM
5	1.42	-0.89	3.63	1.79	3.26
10	0.52	-0.61	0.24	0.28	0.64