

Supplementary Material

Table S1: Species planted in restoration at Hunua Quarry.

Carex geminata, *Carex virgata*, *Coprosma areolata*, *Coprosma spathulata*, *Pseudopanax arboreus*, *Phormium tenax*, *Podocarpus cunninghamii*, *Olearia rani*, *Dacrydium dacrydioides*, *Kunzea ericoides*, *Coprosma robusta*, *Macropiper excelsum*, *Meliclytus ramiflorus*, *Leptospermum scoparium*, *Myrsine australis*, *Prumnopitys ferruginea*, *Hedycarya arborea*, *Vitex lucens*, *Carpodetus serratus*, *Knightia excelsa*, *Dacrydium cupressinum*, *Phyllocladus trichomanoides*, *Beilschmiedia tarairi* and *Beilschmiedia tawa*.

Table S2. Total abundance and mean abundance (\pm SEM; n = 4) per sample of mite RTUs in litter samples at the three forest sites at Hunua Quarry. P-values obtained from Kruskal-Wallis test. Statistically significant results ($P < 0.05$) are shown in bold.

RTU	Total	Mean abundance per sample			P
		Control	Restoration	Mature	
M1	47	3.5 \pm 1.19	3 \pm 1.15	5.25 \pm 2.78	0.858
M2	111	17 \pm 6.70	8 \pm 3.03	2.75 \pm 1.18	0.329
M3	181	7.75 \pm 2.02	28 \pm 19.2	9.5 \pm 2.78	0.812
M4	7	1 \pm 1	0.25 \pm 0.25	0.5 \pm 0.5	0.967
M5	8	0.5 \pm 0.5	1.5 \pm 1.5	0 \pm 0	0.573
M6	1	0.25 \pm 0.25	0 \pm 0	0 \pm 0	0.368
M7	143	24.25 \pm 9.88	1.75 \pm 1.75	9.75 \pm 4.37	0.044
M8	4	1 \pm 0.71	0 \pm 0	0 \pm 0	0.113
M9	108	0.25 \pm 0.25	24 \pm 14.5	2.75 \pm 2.75	0.162
M10	6	0.75 \pm 0.48	0 \pm 0	0.75 \pm 0.48	0.267
M11	2	0.5 \pm 0.29	0 \pm 0	0 \pm 0	0.111
M12	1	0.25 \pm 0.25	0 \pm 0	0 \pm 0	0.368
M13	77	2 \pm 1.68	13 \pm 6.26	4.25 \pm 4.25	0.346
M14	9	2.25 \pm 1.65	0 \pm 0	0 \pm 0	0.113
M15	3	0.25 \pm 0.25	0 \pm 0	0.5 \pm 0.05	0.573
M16	1	0.25 \pm 0.25	0 \pm 0	0 \pm 0	0.368
M17	13	0.75 \pm 0.75	2.5 \pm 2.5	0 \pm 0	0.573
M18	7	0 \pm 0	0 \pm 0	1.75 \pm 1.75	0.368
M20	2	0.5 \pm 0.5	0 \pm 0	0 \pm 0	0.368
M22	48	0.25 \pm 0.25	3.75 \pm 3.22	8 \pm 5.0	0.223
M23	49	5.75 \pm 5.42	2 \pm 1.15	4.5 \pm 3.52	0.906
M24	5	1 \pm 1	0 \pm 0	0.25 \pm 0.25	0.573
M25	24	1 \pm 0.71	3.25 \pm 2.36	1.75 \pm 1.03	0.856
M26	152	0.25 \pm 0.25	13.25 \pm 8.4	24.5 \pm 1.66	0.063
M27	9	2.25 \pm 2.25	0 \pm 0	0 \pm 0	0.368
M28	1	0.25 \pm 0.25	0 \pm 0	0 \pm 0	0.368
M29	1	0.25 \pm 0.25	0 \pm 0	0 \pm 0	0.368
M30	1	0.25 \pm 0.25	0 \pm 0	0 \pm 0	0.368
M31	1	0.25 \pm 0.25	0 \pm 0	0 \pm 0	0.368
M32	10	0 \pm 0	0 \pm 0	2.5 \pm 1.19	0.028
M33	4	0 \pm 0	0 \pm 0	1 \pm 0	0.004
M34	8	0 \pm 0	0 \pm 0	2 \pm 0.41	0.005
M35	1	0 \pm 0	0 \pm 0	0.25 \pm 0.25	0.368
M36	2	0 \pm 0	0 \pm 0	0.5 \pm 0.29	0.111
M37	8	0 \pm 0	0 \pm 0	2 \pm 1.69	0.113
M38	11	0 \pm 0	0.5 \pm 0.5	2.25 \pm 1.31	0.241
M39	1	0 \pm 0	0 \pm 0	0.25 \pm 0.25	0.368
M40	11	0 \pm 0	0 \pm 0	2.75 \pm 2.43	0.113
M41	53	0 \pm 0	8.25 \pm 4.03	5 \pm 2.68	0.082
M42	4	0 \pm 0	0 \pm 0	1 \pm 0.71	0.113
M43	2	0 \pm 0	0 \pm 0	0.5 \pm 0.5	0.368
M44	7	0 \pm 0	0 \pm 0	1.75 \pm 1.18	0.113
M45	1	0 \pm 0	0 \pm 0	0.25 \pm 0.25	0.368
M46	2	0 \pm 0	0 \pm 0	0.5 \pm 0.5	0.368
M47	13	0 \pm 0	2.5 \pm 2.5	0.75 \pm 0.75	0.573
M48	3	0 \pm 0	0 \pm 0	0.75 \pm 0.75	0.368

Table S2 continued. Total abundance and mean abundance (\pm SEM; $n = 4$) per sample of mite RTUs in litter samples at the three forest sites at Hunua Quarry. P-values obtained from Kruskal-Wallis test. Statistically significant results ($P < 0.05$) are shown in bold.

RTU	Total	Mean abundance per sample			P
		Control	Restoration	Mature	
M49	11	0 \pm 0	0.5 \pm 0.29	2.25 \pm 2.25	0.356
M50	3	0 \pm 0	0.75 \pm 0.75	0 \pm 0	0.368
M51	9	0 \pm 0	1 \pm 1	1.25 \pm 1.25	0.573
M52	4	0 \pm 0	0.25 \pm 0.25	0.75 \pm 0.75	0.573
M53	4	0 \pm 0	0 \pm 0	1 \pm 1	0.368
M54	1	0 \pm 0	0 \pm 0	0.25 \pm 0.25	0.368
M55	2	0 \pm 0	0 \pm 0	0.5 \pm 0.5	0.368
M56	1	0 \pm 0	0 \pm 0	0.25 \pm 0.25	0.368
M57	2	0 \pm 0	0 \pm 0	0.5 \pm 0.5	0.368
M58	6	0 \pm 0	0.75 \pm 0.75	0.75 \pm 0.75	0.577
M59	1	0 \pm 0	0 \pm 0	0.25 \pm 0.25	0.368
M60	2	0 \pm 0	0.5 \pm 0.5	0 \pm 0	0.368
M61	9	0 \pm 0	2.25 \pm 1.03	0 \pm 0	0.027
M62	1	0 \pm 0	0.25 \pm 0.25	0 \pm 0	0.368
M63	27	0 \pm 0	6.75 \pm 6.09	0 \pm 0	0.027
M64	22	0 \pm 0	5.5 \pm 4.84	0 \pm 0	0.027
M65	1	0 \pm 0	0.25 \pm 0.25	0 \pm 0	0.368
M66	3	0 \pm 0	0.75 \pm 0.75	0 \pm 0	0.368
M67	8	0 \pm 0	2 \pm 1.08	0 \pm 0	0.028
M68	4	0 \pm 0	1 \pm 0.77	0 \pm 0	0.113

Table S3. Total abundance and mean abundance per sample (\pm SEM; $n = 4$) of springtail RTUs in litter samples at the three forest sites at Hunua Quarry. P-values obtained from Kruskal-Wallis test. Statistically significant results ($P < 0.05$) are shown in bold.

RTU	Total	Mean abundance per sample			P
		Control	Restoration	Mature	
ST1	263	2.75 \pm 0.63	11.75 \pm 6.51	51.25 \pm 35.6	0.061
ST2	40	9.25 \pm 4.64	0.75 \pm 0.75	0 \pm 0	0.059
ST3	7	1.75 \pm 1.75	0 \pm 0	0 \pm 0	0.368
ST4	5	1.25 \pm 0.95	0 \pm 0	0 \pm 0	0.113
ST5	61	13.25 \pm 13.25	1.5 \pm 1.5	0.5 \pm 0.29	0.915
ST6	4	0.5 \pm 0.29	0 \pm 0	0.5 \pm 0.29	0.253
ST7	3	0.25 \pm 0.25	0 \pm 0	0.5 \pm 0.5	0.573
ST8	5	0 \pm 0	0 \pm 0	1.25 \pm 0.48	0.027
ST9	1	0 \pm 0	0 \pm 0	0.25 \pm 0.25	0.368
ST10	15	0 \pm 0	2.75 \pm 2.43	1 \pm 0.71	0.267
ST11	10	0 \pm 0	2 \pm 1	0.5 \pm 0.5	0.034
ST12	2	0 \pm 0	0.5 \pm 0.29	0 \pm 0	0.111
ST13	1	0 \pm 0	0.25 \pm 0.25	0 \pm 0	0.368
ST14	1	0 \pm 0	0.25 \pm 0.25	0 \pm 0	0.368
ST15	1	0 \pm 0	0.25 \pm 0.25	0 \pm 0	0.368
ST16	1	0 \pm 0	0.25 \pm 0.25	0 \pm 0	0.368
ST17	2	0 \pm 0	0.5 \pm 0.5	0 \pm 0	0.368