

Table 4 Dissolved C, total N and base cations leached as affected by various groundcover management practices and different rate of N fertilizer addition in alternative groundcover management plots in a Fraser fir plantation.

Groundcover Management	N-fertilization level	dissolved C	Total N	Ca ²⁺	K ⁺
		-----mg/L-----			
Alfalfa	N ₂₅	2.94±0.39 * ^a	20.06±3.35 ^a	62.04 ±6.85 ^a	1.36±0.29 ^a
	N ₅₀	2.85±0.10 ^a	17.43±2.13 ^a	71.43±6.14 ^a	1.34 ±0.28 ^a
	N ₇₅	2.72±0.25 ^a	22.58±4.16 ^a	87.83±7.02 ^b	1.24 ±0.38 ^a
Dutch white clover	N ₂₅	2.51±0.20 ^a	21.15±2.46 ^a	69.64±7.99 ^a	1.55 ±0.27 ^a
	N ₅₀	2.81±0.12 ^a	23.68±2.93 ^a	76.81±5.51 ^a	1.42 ±0.20 ^a
	N ₇₅	2.98±0.18 ^a	28.83±4.04 ^a	82.86±8.01 ^a	1.60 ±0.27 ^a
Conventional	N ₁₀₀	2.50±0.12 ^a	49.84±1.25 ^b	81.43±4.14 ^a	3.00±0.28 ^b

*Treatments are: alfalfa with addition of 14 kg of N ha⁻¹ yr.⁻¹ (alfalfa N₂₅), alfalfa with addition of 28 kg of N ha⁻¹ yr.⁻¹ (alfalfa N₅₀), alfalfa with addition of 48 kg of N ha⁻¹ yr.⁻¹ (alfalfa N₇₅), clover with addition of 14 kg of N ha⁻¹ yr.⁻¹ (alfalfa N₂₅), clover with addition of 28 kg of N ha⁻¹ yr.⁻¹ (alfalfa N₅₀), clover with addition of 48 kg of N ha⁻¹ yr.⁻¹ (alfalfa N₇₅), and conventionally managed plots that received 54 kg of N ha⁻¹ yr.⁻¹ (CONV). *Treatments with the same letter at each soil depth are not statistically different.*