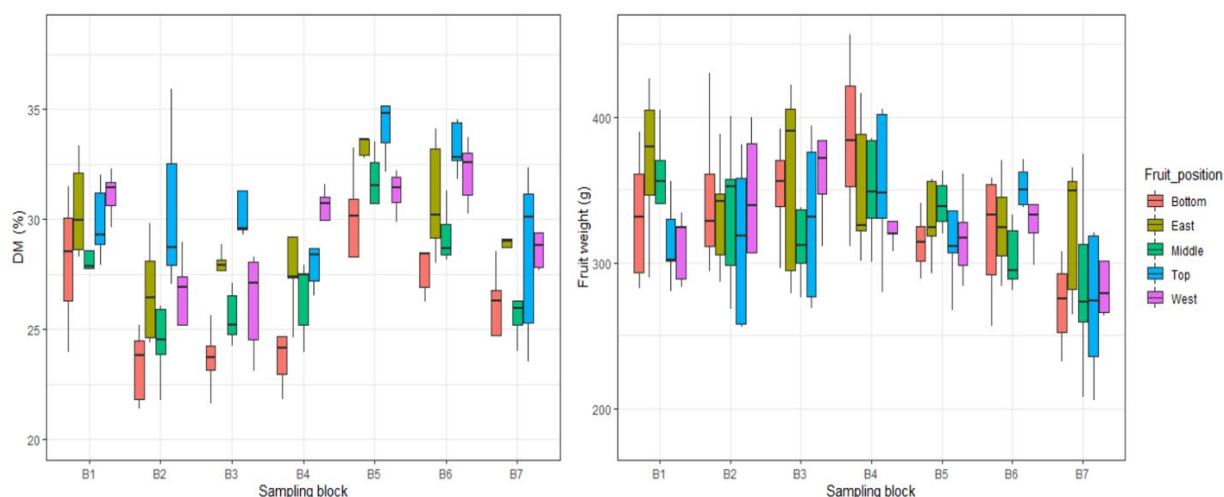


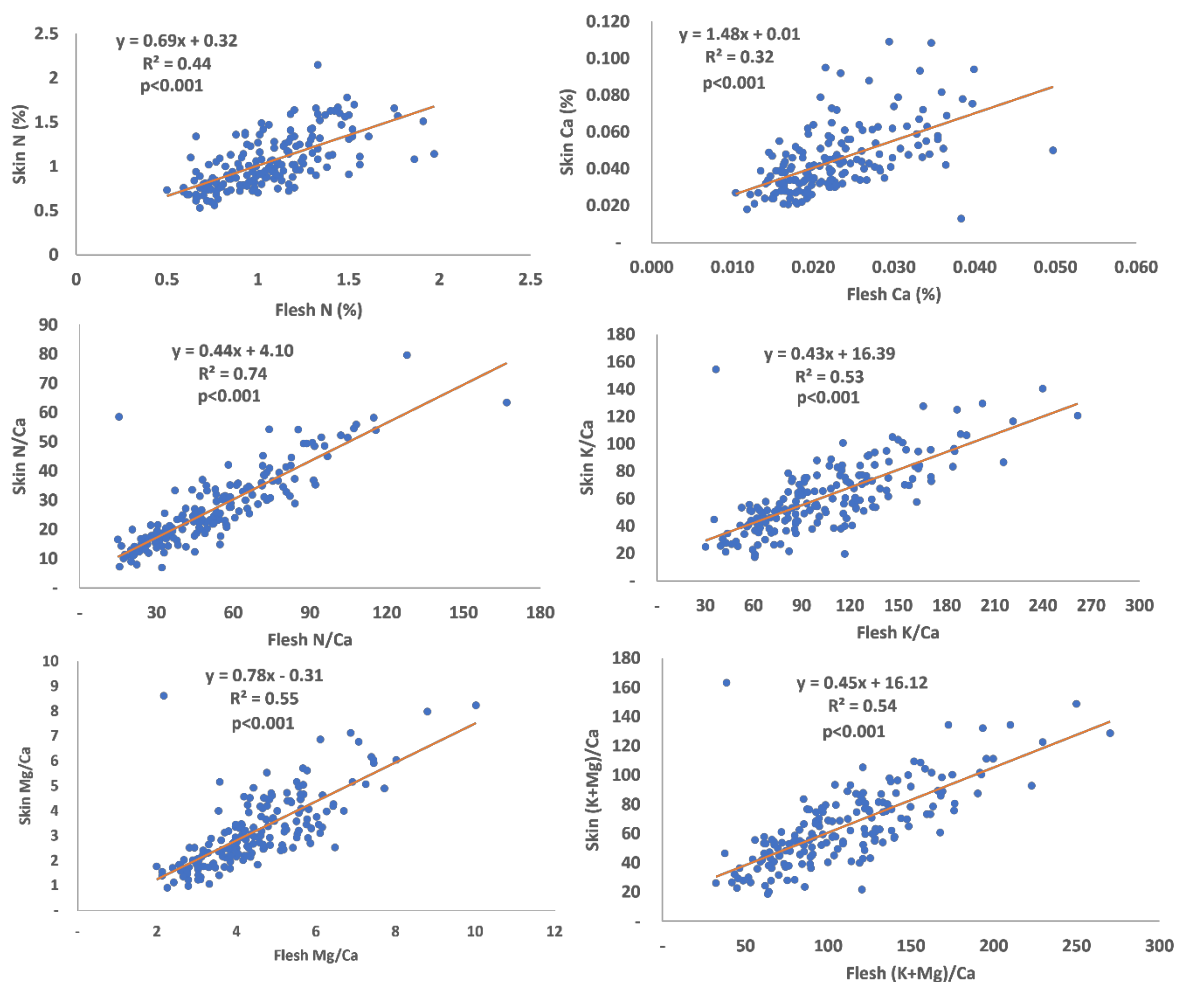
## Supplementary file

**Table S1.** Fruit flesh and skin N/Ca parameters for ‘Hass’ avocado sourced from three farms at different positions in the canopy. Data were rearranged as sun exposed (top + east +west) and shaded fruit (middle + bottom) based on ANOVA results and divided into three farms containing total of seven sampling blocks. F: farm, B: sampling block, and n: number of samples in each category.

Farm	Canopy position	Parameters	N/Ca	
			Flesh	Skin
F1 (B1-4)	Sun-exposed (n=60)	Mean	53.58	28.13
		Standard deviation	17.46	8.85
		Variance	304.85	78.27
		Maximum	94.44	51.52
		Minimum	17.66	11.41
	Shaded (n=40)	Mean	75.75	38.95
		Standard deviation	27.18	13.77
		Variance	738.50	189.61
		Maximum	166.95	79.93
		Minimum	31.09	15.71
F2 (B5-6)	Sun-exposed (n=30)	Mean	28.87	17.83
		Standard deviation	11.18	9.04
		Variance	124.95	81.75
		Maximum	60.63	58.46
		Minimum	14.89	7.23
	Shaded (n=20)	Mean	38.77	19.59
		Standard deviation	19.47	10.12
		Variance	378.94	102.48
		Maximum	108.05	55.83
		Minimum	16.23	6.92
F3 (B7)	Sun-exposed (n=15)	Mean	48.25	19.92
		Standard deviation	16.89	5.68
		Variance	285.14	32.28
		Maximum	84.18	32.82
		Minimum	23.29	11.96
	Shaded (n=10)	Mean	62.91	27.63
		Standard deviation	23.21	11.46
		Variance	538.54	131.25
		Maximum	96.88	45.00
		Minimum	28.49	12.03



**Figure S1.** Data distribution indicated by box and whiskers plots for DM (%) and fruit weight (g) in 'Hass' avocado fruit at five different positions within the canopy across seven orchard blocks.



**Figure S2.** Regression correlation plots between fruit flesh and skin mineral concentrations and their ratios at harvest (n = 175).