

Hort Americas Hydroponic Fertilizer Spreadsheet

[Watch the spreadsheet tutorial here!](#)



First: Enter the recommended starter rates for fertilizer inputs and add source water test results.

	Hort Americas 9-7-37 Base	YaraLiva CALCINIT Greenhouse Grade Calcium Nitrate	KALI EPSOTOP Greenhouse Grade Magnesium Sulfate		
Recommended Starter Rates (mg/L)	325-544	945 Text	441		
Current Rate (mg/L)				Source Water	Total ppm
N					
P					
K					
Ca					
Mg					
S					
Fe					
Mn					
Zn					
B					
Cu					
Mo					

Second: Compare total ppm to reference rates then adjust fertilizer inputs until total ppm is within desired range.

Reference Rates For Leafy Greens

	Total ppm	Howard Resh	Observed Rates	Cornell	UA CEAC
N		165-200	125-200	210	189
P		50	15-90	31	39
K		150-210	80-350	235	341
Ca		150-200	38-220	200	170
Mg		40-60	14-96	49	48
S				64	
Fe		5	1.0-10	4	2
Mn		0.5	0.25-1.0	0.5	0.55
Zn		0.05-0.15	0.1-2.5	0.1	0.33
B		0.3-0.5	0.14-1.5	0.5	0.28
Cu		0.03-0.15	0.023-0.13	0.1	0.05
Mo		0.02-0.05	0.024-0.075	0.01	0.05

Conversion: 1000 mg/L = 3.785 grams/gallon = 8.345 pounds/1000 gallons