

## Soil Level Table

The levels assigned are generalized to be applicable to most cropping environments  
Some crops may need more or less of specific nutrients (N, P, K)

**Low** High probability that applying nutrient will elicit a growth response.  
**Medium** Moderate probability of plant growth response from application of the nutrient.  
**High** Little or no crop response expected from application of this nutrient.  
**Very High** Adding the nutrient may reduce growth or cause an imbalance.

Nutrient				units	Method
EC	Low	0	0.49	dS/m	Water extract
	Medium	0.5	3.5	dS/m	
	High	3.59	4.49	dS/m	
	Very High	4.5		dS/m	
pH	Low	0	5.99	SU	Water extract
	Medium	6	8	SU	
	High	8.01	8.39	SU	
	Very High	8.4		SU	
Sodium, Na	Low	0	100	ppm	NH4OAc (pH 8.5)
	Medium	101	200	ppm	
	High	201	300	ppm	
	Very High	301		ppm	
Calcium, Ca	Low	0	500	ppm	NH4OAc (pH 8.5)
	Medium	501	1500	ppm	
	High	1501	3000	ppm	
	Very High	3001		ppm	
Magnesium, Mg	Low	0	80	ppm	NH4OAc (pH 8.5)
	Medium	81	139	ppm	
	High	140	250	ppm	
	Very High	251		ppm	
Potassium, K	Low	0	80	ppm	NH4OAc (pH 8.5)
	Medium	81	249	ppm	
	High	250	400	ppm	
	Very High	401		ppm	
Nitrate-N, NO3-N	Low	0	9.9	ppm	Cadmium Reduction
	Medium	10	25.9	ppm	
	High	26	50.9	ppm	
	Very High	51		ppm	
Phosphate-P, PO4-	Low	0	9.9	ppm	Olsen Bicarbonate Extractior
	Medium	10	25.9	ppm	
	High	26	50.9	ppm	
	Very High	51		ppm	
Boron, B	Low	0	0.19	ppm	Hot Water Soluble
	Medium	0.2	0.49	ppm	
	High	0.5	2	ppm	
	Very High	2.1		ppm	
Sulfate-S, SO4-S	Low	0	4.9	ppm	Water Soluble
	Medium	5	9.9	ppm	
	High	10	50	ppm	
	Very High	51		ppm	
Iron, Fe	Low	0	2.5	ppm	DTPA
	Medium	2.6	7.9	ppm	
	High	8	49.9	ppm	
	Very High	50		ppm	
Copper, Cu	Low	0	0.19	ppm	DTPA
	Medium	0.2	0.49	ppm	
	High	0.5	2.59	ppm	
	Very High	2.6		ppm	
Zinc, Zn	Low	0	0.49	ppm	DTPA
	Medium	0.5	2.49	ppm	
	High	2.5	5	ppm	
	Very High	5.1		ppm	
Manganese, Mn	Low	0	2.5	ppm	DTPA
	Medium	2.6	7.9	ppm	
	High	8	49.9	ppm	
	Very High	50		ppm	

Sources: Agronomic Handbook by JB Jones; Western Fertilizer Handbook; personnal consultation with four consulting agronomist in western US.