

Hydroponic Nutrient Chart for Vegetables — EC, ppm & pH by Crop & Stage moondogapps.com

Target EC, ppm (500 & 700 scale) and pH by growth stage. Every row traces to published university controlled-environment research.

Crop & stage	EC (mS/cm)	ppm (500)	ppm (700)	pH	Source
Leafy greens & herbs					
Lettuce — seedling	0.8–1.2	400–600	560–840	5.6–6.0	Cornell CEA
Lettuce — mature head	1.4–1.8	700–900	980–1260	5.6–6.0	Cornell CEA
Leafy greens — kale, chard, spinach, arugula	1.2–1.8	600–900	840–1260	5.8–6.2	Penn State
Basil	1.4–1.8	700–900	980–1260	5.5–6.0	Penn State
Leafy herbs — cilantro, parsley, mint, chives	1.4–1.8	700–900	980–1260	5.5–6.0	Penn State
Microgreens — all cultivars	1.0–1.8	500–900	700–1260	5.8–6.2	Produce Grower
Fruiting crops					
Strawberry	1.2–1.8	600–900	840–1260	5.8–6.2	UF/IFAS
Pepper — bell & chili	1.8–2.4	900–1200	1260–1680	5.8–6.2	Cornell CEA
Cucumber	1.8–2.4	900–1200	1260–1680	5.8–6.2	UF/IFAS
Tomato — seedling	1.2–1.6	600–800	840–1120	5.8–6.2	Penn State
Tomato — vegetative	1.8–2.2	900–1100	1260–1540	5.8–6.2	UF/IFAS
Tomato — fruit set	2.2–2.8	1100–1400	1540–1960	5.8–6.2	UF/IFAS

EC is the source value — the two ppm columns are just conversions: **500 scale** = EC × 500 (Hanna, Bluelab); **700 scale** = EC × 700 (Truncheon, HM Digital). The same solution reads a bigger number on the 700 scale, so match the column to your meter. **Run the low end early** (young roots are salt-sensitive), raise EC through vegetative growth, and shift fruiting crops toward more potassium at fruit set. Subtract your source-water ppm before dosing. Most hydroponic vegetables and herbs feed best at pH **5.5–6.5**.

Sources: Cornell CEA (Mattson & Lieth, *A Recipe for Hydroponic Success*) · Penn State Extension (hydroponics nutrient solutions) · UF/IFAS (hydroponic tomato, cucumber & strawberry) · *Produce Grower* (commercial microgreens). Starting-point ranges — adjust to your cultivar, climate and system, and verify with your own measurements. · Free chart from moondogapps.com/crop — © 2026 Moon Dog.