

Plant Requirements

The pH and electrical-conductivity values specified here are given as a broad range. It should be noted that specific plant requirements will vary according to regional climatic conditions, and from season to season within that region. These values are intended for Hydroponic plants only (soil grown plants will differ). Electrical-Conductivity (EC) or Conductivity Factor (cF) can be expressed as either milliSiemens (mS), cF, or parts per million (PPM) 1 mS = 10cF = 700ppm.

<u>Vegetables</u>				
<u>Plants</u>	<u>pH</u>	<u>cF</u>	<u>EC</u>	<u>PPM</u>
Ambra radicchio	5.5-6.5			
Artichoke	6.5-7.5	8-18	0.8-1.8	560-1260
Asparagus	6.0-6.8	14-18	1.4-1.8	980-1260
Bean (Common)	6.0	20-40	2-4	1400-2800
Beans (Italian bush)	6.0-6.5			
Beans (Lima)	6.0-6.5			
Beans (Pole)	6.0-6.5			
Beetroot	6.0-6.5	8-50	0.8-5	1260-3500
Broad Bean	6.0-6.5	18-22	1.8-2.2	1260-1540
Broccoli	6.0-6.5	28-35	2.8-3.5	1960-2450
Brussell Sprout	6.5-7.5	25-30	2.5-3.0	1750-2100
Cabbage	6.5-7.0	25-30	2.5-3.0	1750-2100
Capsicum	6.0-6.5	18-22	1.8-2.2	1260-1540
Carrots	6.3	16-20	1.6-2.0	1120-1400
Cauliflower	6.0-7.0	5-20	0.5-2.0	1050-1400
Celery	6.5	18-24	1.8- 2.4	1260-1680
Collard greens	6.5-7.5			
Cucumber	5.8-6.0	17-25	1.7-2.5	1190-1750
Eggplant	5.5-6.5	25-35	2.5-3.5	1750-2450
Endive	5.5	20-24	2.0-2.4	1400-1680
Fodder	6.0	18-20	1.8-2.0	1260-1400
Garlic	6.0	14-18	1.4-1.8	980-1260
Leek	6.5-7.0	14-18	1.4-1.8	980-1260
Lettuce	5.5-6.5	8-12	0.8-1.2	560-840
Marrow	6.0	18-24	1.8-2.4	1260-1680

Okra	6.5	20-24	2.0-2.4	1400-1680
Onions	6.0-6.7	14-18	1.4-1.8	980-1260
Pak-choi	7.0	15-20	1.5-2.0	1050-1400
Parsnip	6.0	14-18	1.4-1.8	980-1260
Pea	6.0-7.0	8-18	0.8-1.8	980-1260
Peas (Sugar)	6.0-6.8			
Pepino	6.0-6.5	20-50	2.0-5.0	1400-3500
Peppers	5.8-6.3	20-30	2.0-3.0	1400-2100
Bell peppers	6.0-6.5	20-25	2.0-2.5	1400-1750
Hot Peppers	6.0-6.5	30-35	3.0-3.5	2100-2450
Potato	5.0-6.0	20-25	2.0-2.5	1400-1750
Pumpkin	5.5-7.5	18-24	1.8-2.4	1260-1680
Radish	6.0-7.0	16-22	1.6-2.2	840-1540
Spinach	5.5-6.6	18-23	1.8-2.3	1260-1610
Silverbeet	6.0-7.0	18-23	1.8-2.3	1260-1610
Strawberry	5.5-6.5	18-22	1.8-2.2	1260-1540
Sweet Corn	6.0	16-24	1.6-2.4	840-1680
Sweet Potato	5.5-6.0	20-25	2.0-2.5	1400-1750
Swiss chard	6.0 6.5			
Squash (Summer)	5.0-6.5			
Squash (Winter)	5.0-6.5			
Taro	5.0-5.5	25-30	2.5-3.0	1750-2100
Tomato	5.5-6.5	20-50	2.0-5.0	1400-3500
Turnip	6.0-6.5	18-24	1.8-2.4	1260-1680
Zucchini	6.0	18-24	1.8-2.4	1260-1680

<u>Herbs</u>				
<u>Plants</u>	<u>pH</u>	<u>cF</u>	<u>EC</u>	<u>PPM</u>
Basil	5.5-6.5	10-16	1.0-1.6	700-1120
Chicory	5.5-6.0	20-24	2.0-2.4	1400-1600
Chives	6.0-6.5	18-22	1.8-2.4	1260-1540
Fennel	6.4-6.8	10-14	1.0-1.4	700-980
Lavender	6.4-6.8	10-14	1.0-1.4	700-980
Lemon Balm	5.5-6.5	10-16	1.0-1.6	700-1120
Marjoram	6.0	16-20	1.6-2.0	1120-1400

Mint	5.5-6.0	20-24	2.0-2.4	1400-1680
Mustard Cress	6.0-6.5	12-24	1.2-2.4	840-1680
Parsley	5.5-6.0	8-18	0.8-1.8	560-1260
Rosemary	5.5-6.0	10-16	1.0-1.6	700-1120
Sage	5.5-6.5	10-16	1.0-	700-1120
Thyme	5.5-7.0	8-16	0.8-1.6	560-1120
Watercress	6.5-6.8	4-18	0.4-1.8	280-1260

As a general rule, plants will have a higher nutrient requirement during cooler months, and a lower requirement in the hottest months. Therefore, a stronger nutrient solution should be maintained during winter, with a weaker solution during summer when plants take up and transpire more water than nutrients.