

**Vegetable Crops- Environmental Requirements-**  
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*NOTE- Data on environmental requirements for vegetables has been obtained from research conducted in many tropical and temperate areas. This information may or may not correlate well with climatic requirements for vegetable crops in Hawaii but serve as a general indication of how well these crops will perform under particular environmental conditions. Most vegetables listed below have a wide adaptability to soil type provided the soils have good drainage and that adequate disease management techniques are available.*

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**Broccoli:**

Optimum temperature range (F):	57-68
Temperature extremes (F):	32-68
Recommended soil pH:	6-6.8
Salt tolerance:	moderate
Water requirement:	20 in/crop cycle

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**Head lettuce:**

Optimum temperature range (F):	66-73 day; 45-52 night
Temperature extremes (F):	45-75
Recommended soil pH:	6-6.8
Salt tolerance:	moderate
Water requirement:	9 inches/crop cycle

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**Bulb onion:**

Optimum temperature range (F):	55-75
Temperature extremes (F):	45-85
Recommended soil pH:	5.3-6.5 (mucks); 6.2-6.8 (mineral soils)
Salt tolerance:	Sensitive
Water requirement:	19 inches/crop cycle

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**Tomato:**

Optimum temperature range (F):	65-75
Optimum temp. for fruiting (F)	59-68
Temperature extremes (F):	53-95
Recommended soil pH:	5.5-7.5
Salt tolerance:	moderate
Water requirement:	9 inches/crop cycle

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Bell Pepper:

Optimum temperature range (F):	65-85
Temperature extremes (F):	60-90
Recommended soil pH:	5.5-6.8
Salt tolerance:	moderate
Water requirement:	23 inches/crop cycle

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Potatoes:

Optimum temperature range (F):	60-65
Temperature extremes (F):	45-75
Recommended soil pH:	5.4-7.0
Salt tolerance:	moderate
Water requirement:	20-30 inches/crop cycle

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Carrots:

Optimum temperature range (F):	59-65
Temperature extremes (F):	45-75
Recommended soil pH:	5.5-6.8
Salt tolerance:	moderate
Water requirement:	17 inches/crop cycle

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Celery:

Optimum temperature range (F):	60-75
Temperature extremes (F):	55-75
Recommended soil pH:	6-6.6 (mineral); 5.5-6.0 (organic soils)
Salt tolerance:	sensitive
Water requirement:	30 inches/crop cycle

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Muskmelon:

Optimum temperature range (F):	65-75
Temperature extremes (F):	60-90
Recommended soil pH:	6-6.8
Salt tolerance:	moderate
Water requirement:	15 inches/crop cycle

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