

The above chart modified from several sources (1, 2) shows the relationship of soil pH to nutrient availability. The optimum range for most vegetable plants is in the range of 6.3 to 6.8. Soil pH can change on a weekly or monthly basis throughout the growing season, and is dependent on temperature, rainfall, and biological activity in the soil. When the soil pH falls below 5.5, the major plant nutrients required for growth (N, P, K, S, Ca, and Mg) become significantly less available. Above 7.5 pH, the micronutrients (Fe, Mn, B, Cu, and Zn) become less available.

References: (1) National Plant Food Institute, and (2) Illinois Agronomy Handbook