

## **Basic Crop Nutrition**

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- Edible crops need essential plant nutrients
  - Each nutrient is equally important
  - Balance and proper pH are key
    - Deficiencies
    - Toxicities
  - Nutrients are needed to help the crop complete its lifecycle
    - 14 Essential Plant Nutrients
      - Carbon & Oxygen derived from the air
    - Macro and Micronutrients
    - Mobile Nutrients
      - Nutrients that <u>move</u> to areas where it is lacking.
      - Moves from older leaves to younger tissue
      - Results in discoloring in older leaves
        - Nitrogen
        - Phosphorus
        - Potassium
        - Magnesium
    - Non-Mobile Nutrients
      - These nutrients can not move
      - Deficiencies appear in younger leaves
        - Boron
        - Calcium
        - Copper
        - Iron
        - Manganese
        - Zinc \*\*
- Nutrients need to be in <u>ionic</u> form in order for plants to utilize them
  - Complete or individual fertilizers
  - Soil or foliar applications
  - Granular or water soluble
  - Conventional vs. organic inputs





