Fertilization

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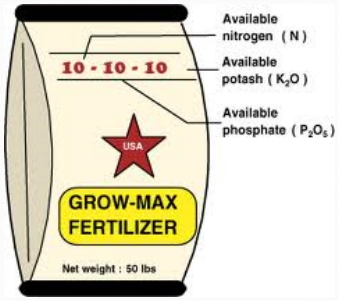
- Understanding crop needs

Crop	Nitrogen	Phosphorus	Potassium
Lettuce	70	15	110
Cucumber	50	15	60
Taro	350	150-200	500-600
Watermelon	170	25	150



- Crop nutrition considerations
  - Complete or individual fertilizers
  - Soil or foliar applications
  - Granular or water soluble
  - Conventional vs. organic inputs
  - More vs. less
  - Cost factor
- Understand nutrient composition of fertilizers
  - NPK is not in abundance in <u>certain</u> soil systems
    - Most frequently applied nutrients
    - Applied in larger quantities than other crop nutrients
  - Minor elements are essential for plant growth
- Calculating fertilizer rates
  - <u>Example:</u>
  - If you want to apply 50 pounds of N /acre using urea (46-0-0)
  - X (amount of urea) x 46% = 50 pounds of N
  - X= 50 pounds of N/ 46%
  - Solution: 109 pounds of Urea to apply 50 pounds of N / acre
- Frequency of applications
  - Frequent applications vs. lump sum
- Timing fertilizers with crop type

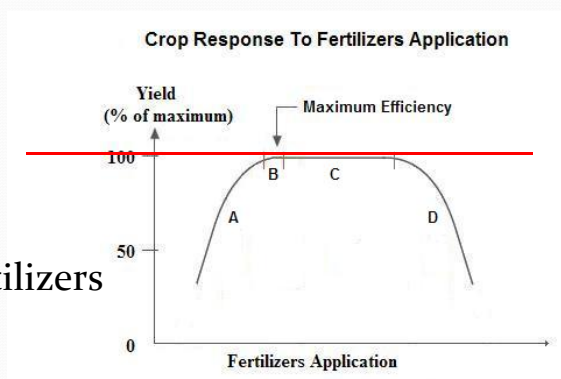


Photo: smart-fertilizer.com