Organic Fertilizers

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- Verify they are approved for use in organic systems
- Organic fertilizers slowly release nutrients
  - Organic material must be decomposed by microbial activity
  - Unbroken material may not be readily available to plants
- Organic fertilizer formulations
  - Made of natural products
  - Not man-made products
  - Fertility based on:
    - Manure
    - Compost
    - Cover cropping systems
    - Micro-organisms
    - Mycorrhizae fungi
    - Nitrogen fixing bacteria
    - Vermicompost & tea
    - Nitrogen fixing plants
    - Seaweed
    - Commercial OMRI approved fertilizer products
    - Etc.
- Understand nutrient composition of fertilizers
  - NPK is not in abundance in certain soil systems
  - Most frequently applied nutrients
  - Applied in larger quantities than other crop nutrients
  - Minor elements are essential for plant growth
- Understand crop needs
- Calculating fertilizer rates
  - Example:
    - If you want to apply 50 pounds of N /acre using bone meal (9-3-0)
    - X (amount of bone meal) x 9% = 50 pounds of N
    - X= 50 pounds of N / 9%
    - Solution: 555 pounds of bone meal to apply 50 pounds of N / acre