Calcium and Sulfur

1. What is the ideal pH range for most crops?
2. Medium ground limestone = 4 Tons
3. Efficiency = .85%; % Ca = 32%
4. How many lb usable CaCO3?
5. How many lb Calcium?
Calcium and Sulfur

- Gypsum is CaSo4 2H2O
- 23% Calcium
- 19% Sulfur
- 5 Tons/acre supplies how much Calcium?
- How much Sulfur?
- Why would you choose gypsum instead of lime for a Calcium source?
Compost

• You have a high quality compost that is 1-0.5-1

• You have a 5 Acre field and want to put 10 Tons per acre. How many Tons do you need?

• How many pounds per acre of each nutrient are you putting on?
Nutrient budget: lettuce

- Lettuce uses 120 lb N. You have a sandy soil and use a rototiller frequently
- You estimate your loss at 30%
- How many lb of N do you need?
- Your o.m. is 1%. ENR = 80 lb
- Your soil test shows 10 lb of N in the soil
- You have a weak cover crop of bell beans that you estimate provides 100 lb of N; half available for this crop
- How many lb of N do you need to add?
Choice of amendment

- You have sufficient P and K, so you choose to fertilize with 10-0-0
- How many lb do you need for your crop of lettuce? Amnt = amnt to add/% of nutrient in product
- 10-0-0 costs $50/100lb
- 12-0-0 costs $60/100lb
- Which is the economical choice?
Foliar nutrients

- You decide to provide 10 lb per acre N with a foliar material called Agrothrive
- It is a 3-2-2 liquid
- It weighs 11 lb per gallon
- How much N in one gallon?
- How much do you need?