

2009 Crop Management Diagnostic Clinics Maximizing Soybean Yield – Chapter 1 Crop and Soil Management for High Yield Soybean

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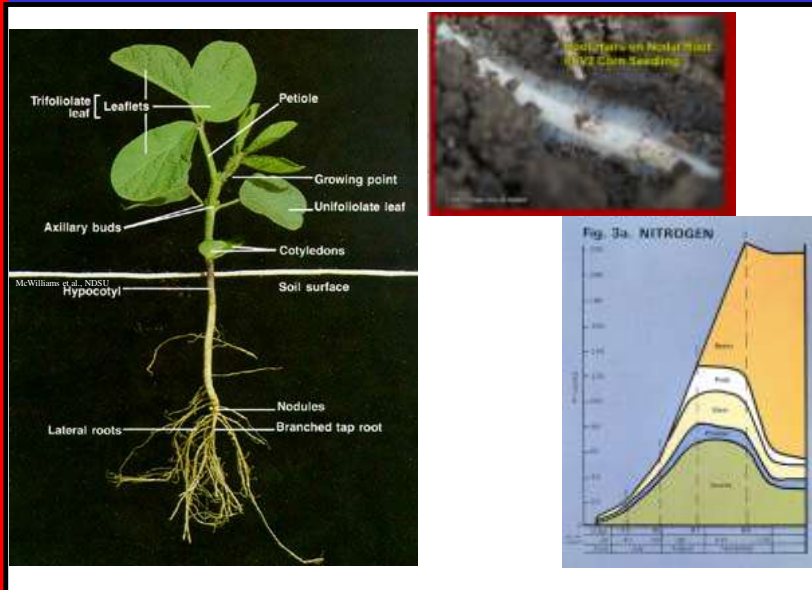
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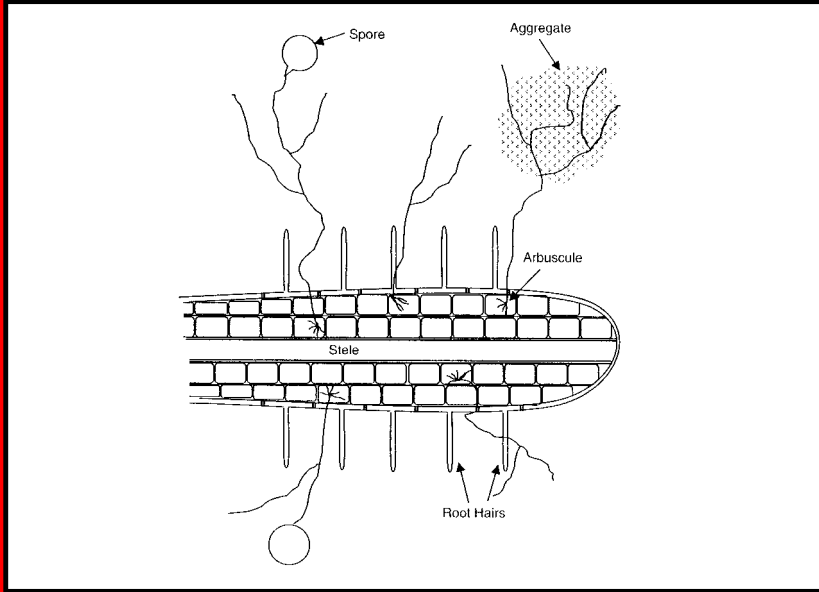
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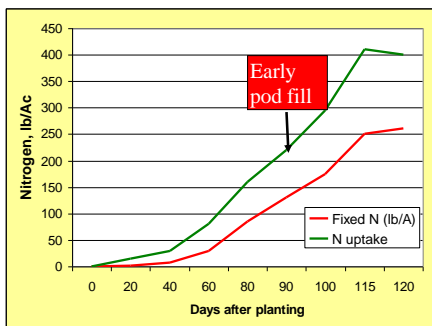


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Soybean N need



Starter N?

1. 50 lb in ND and RRV of MN
2. 6% yield increase with 15 lb in Brookings, 2x2
3. Ogalala
4. No yield advantage further south, e.g MN, MO
5. What about no-till irrigated C-C-SB?

N application at beginning podfill, e.g. 25-30 lb through fertigation

1. IA, MN, SD, MO: little or no response when yield <60 bu/A
2. ~7 bu gain if >60 bu/A in KS
3. MO: >60 bu/A; pH < 7.5; soil nitrate <75 lb/A in 0-24" depth (9-10 ppm)
4. Guidelines for Nebraska

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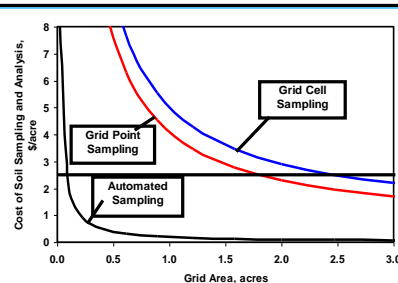
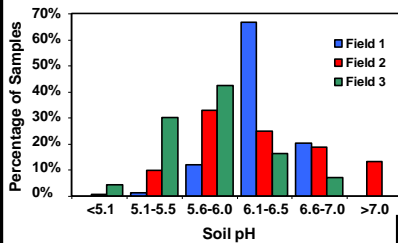
Improving fertilizer P recovery

- Apply if Bray-1 or Mehlich 3 are < 13 ppm; Olsen < 8 ppm
- P use efficiency improved with band application; apply >1 inch from seed
- Additives to improve fertilizer P recovery, e.g. by reducing P fixation in soil

1. Are they effective?
2. Will more P need to be applied eventually?

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Lime use to amend acid soils



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