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

Lime use to amend acid soils