



### **Impact of nitrogen of colour development in processing BANANA PEPPERS**

Objectives: To determine if nitrogen impacts colour development in processing banana peppers

Variety: Inferno and Super Hungarian

Site characteristics: Loam (51:33:16 %SSC) pH 7.3 4.8% OM

N rates: Preplant broadcast incorporated ammonium nitrate at 0, 31, and 125 lb N/ac

General 2005 conclusions:

- No difference in banana pepper yields with the different nitrogen treatments –likely due to soil available nitrogen and moisture stress
- For Inferno, at the early harvest date, more yellow peppers at 125 lb N/ac compared to 0 and 31 lb N/ac
- For Super Hungarian at the early pick, more yellow peppers at 31 lb N/ac
- To optimize yellow peppers, N rate should be modified for these two varieties
- If picking early (12 August 2005) and all yellows, it was possible to pick the crop twice and increase overall yields

### **Nitrogen use efficiency in processing winter SQUASH**

Objectives: 1) Evaluate of application technology, timing of application and fertilizer source to optimize nitrogen use efficiency  
2) Estimate nitrogen budget; including crop nitrogen uptake and removal and losses to the environment

Variety: Ultra

N rates:

- Preplant broadcast incorporated ammonium nitrate at 0, 27, 58, 98, 196 lb N/ac
- Preplant broadcast incorporated UMAXX<sup>®</sup> at 98 lb N/ac
- Split application ammonium nitrate at 58 + 40 lb N/ac

General 2005 conclusions:

- At the 3 different sites, yield either decreased or did not change with N application or, maximized at approximately 105 lb N/ac – more site-years worth of data needed to determine the optimal rate – this is the 2<sup>nd</sup> year of a 4 year study
- In-season nitrogen applications and UMAXX<sup>®</sup> did not improve squash yield compared to 98 lb N/ac
- Soil and plant N laboratory analysis was not complete at time of publication

### **Nitrogen use efficiency in processing CARROTS**

Objectives: 1) Evaluate of application technology, timing of application and fertilizer source to optimize nitrogen use efficiency  
2) Estimate nitrogen budget; including crop nitrogen uptake and removal and losses to the environment

Variety: SugarSnack

Site characteristics: Sandy loam (77:13:10 %SSC) pH 7.9 3% OM

N rates:

- Preplant broadcast incorporated ammonium nitrate at 0, 58, 98, 147 196 lb N/ac
- Preplant broadcast incorporated UMAXX<sup>®</sup> at 98 lb N/ac
- Split application ammonium nitrate at 58 + 40 lb N/ac

General 2005 conclusions:

- Yield maximized at approximately 100 lb N/ac at one site – more site-years worth of data needed to determine the optimal rate – this is the 2<sup>nd</sup> year of a 4 year study
- In-season nitrogen applications and UMAXX<sup>®</sup> did not increase carrot yields
- Soil and plant N laboratory analysis was not complete at time of publication