

Fertility Trials

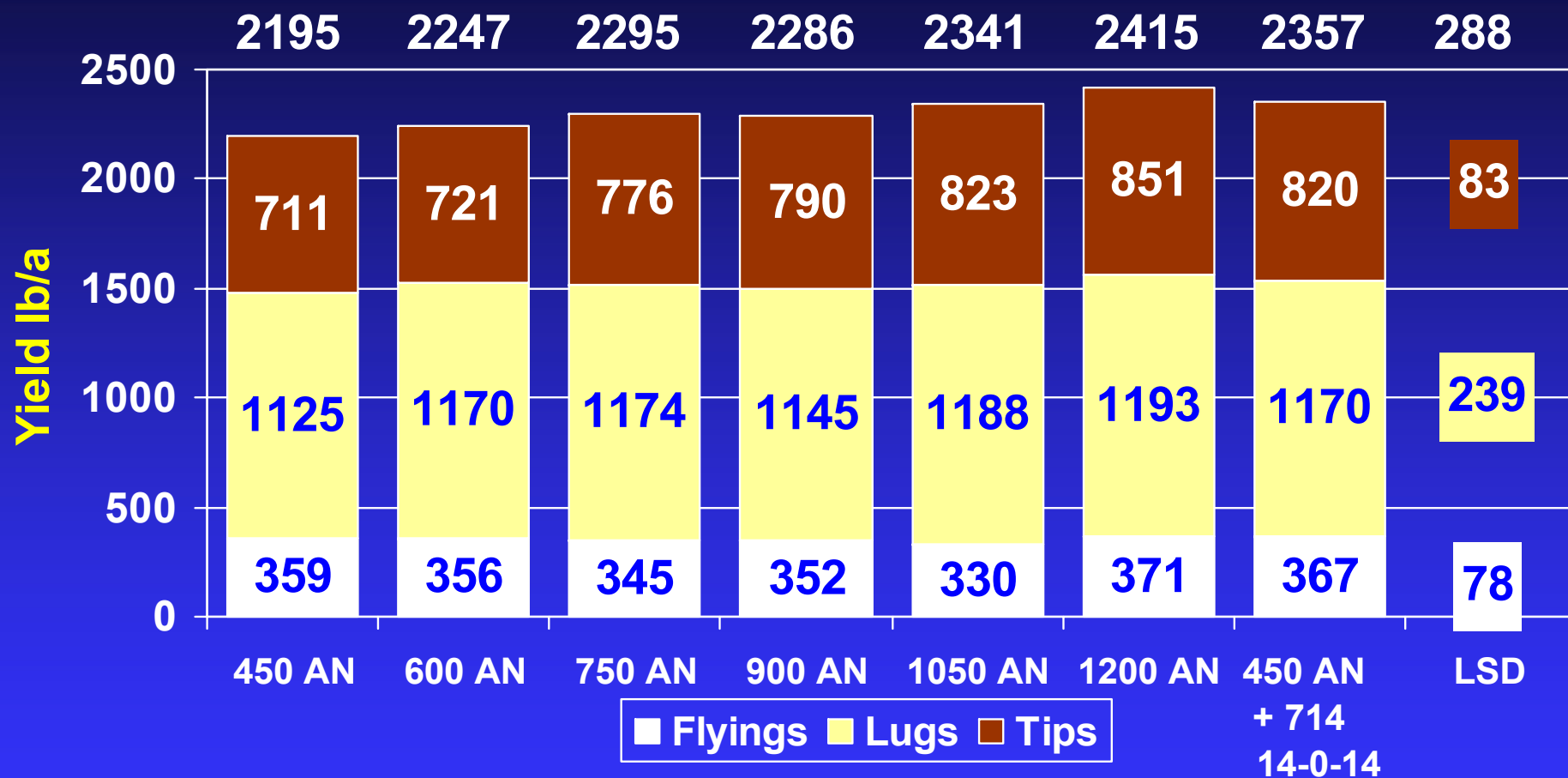
Increasing rates of nitrogen fertilizer beyond 150 lb/a can lower soil pH but does not necessary increase yield. Burley tobacco fertilized with 1200 lb/a of nitrogen yielded significantly better than 450 lb/a, but was not significantly better than other treatments. Tobacco fertilized with 450 lb/a ammonium nitrate plus 714 lb/a of 14-0-14 (calcium nitrate plus potassium nitrate) yielded very close to that of 1200 lb/a of ammonium nitrate, but with 150 lb/a less nitrogen.

Nitrogen rate increase did not correlate well with Total TSNA, NNN, nitrate and nitrite levels but slight increases were common.

Fertility Trials (continued)

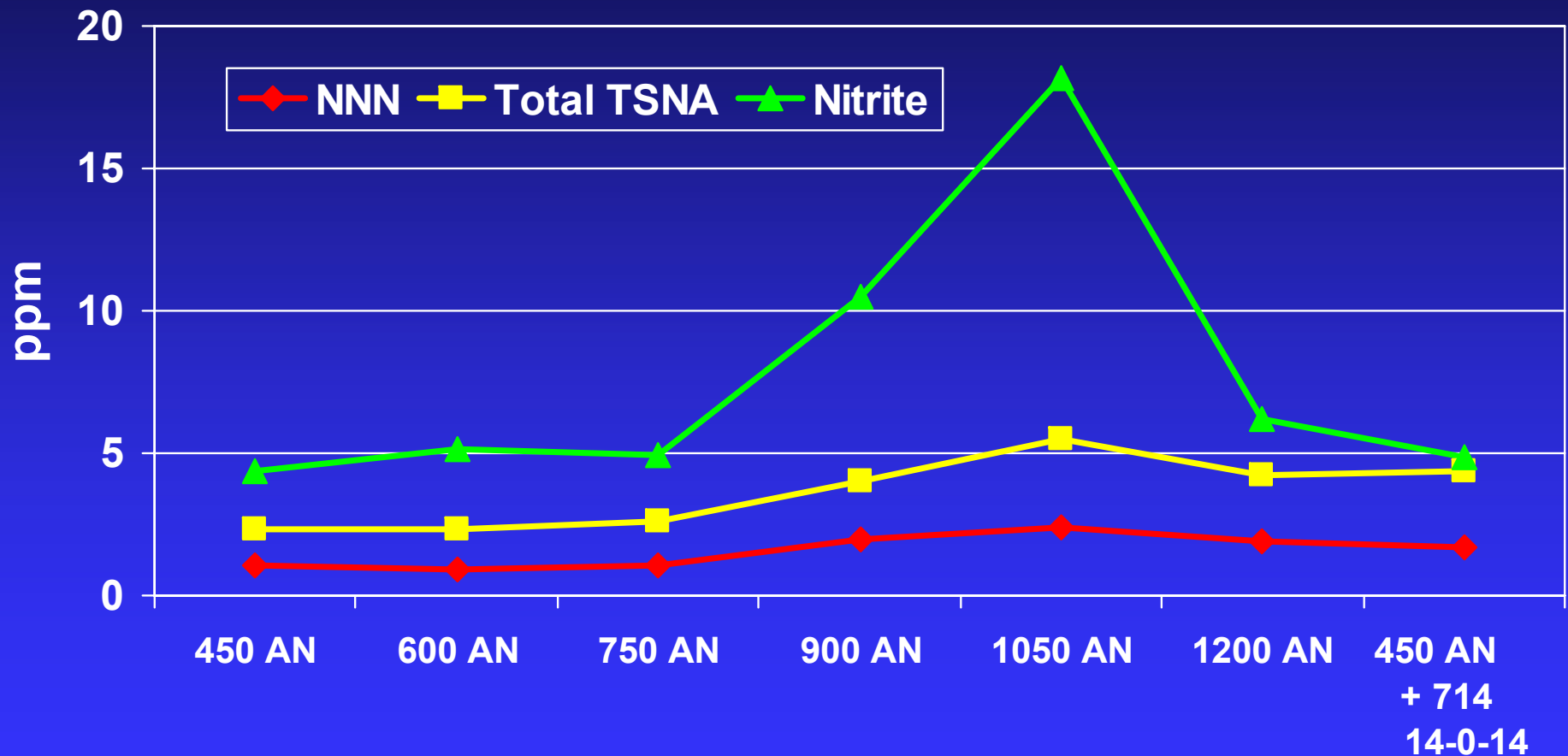
Nitrogen fertilizer sources applied at 250 lb/a produced similar results. However, the treatment of 450 ammonium nitrate down with 645 lb/a of calcium nitrate produces higher yields than either treatment that received urea. Total TSNA, NNN, nitrate and nitrite levels were not influenced by nitrogen sources.

Effects of Nitrogen Rate on Burley Yield Across 4 Locations



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix. Locations = Fayette, Jackson, Madison & Shelby Counties. Nitrogen at 1200 lb/a produced significantly more yield than 450 lb/a. There were no other significant differences.

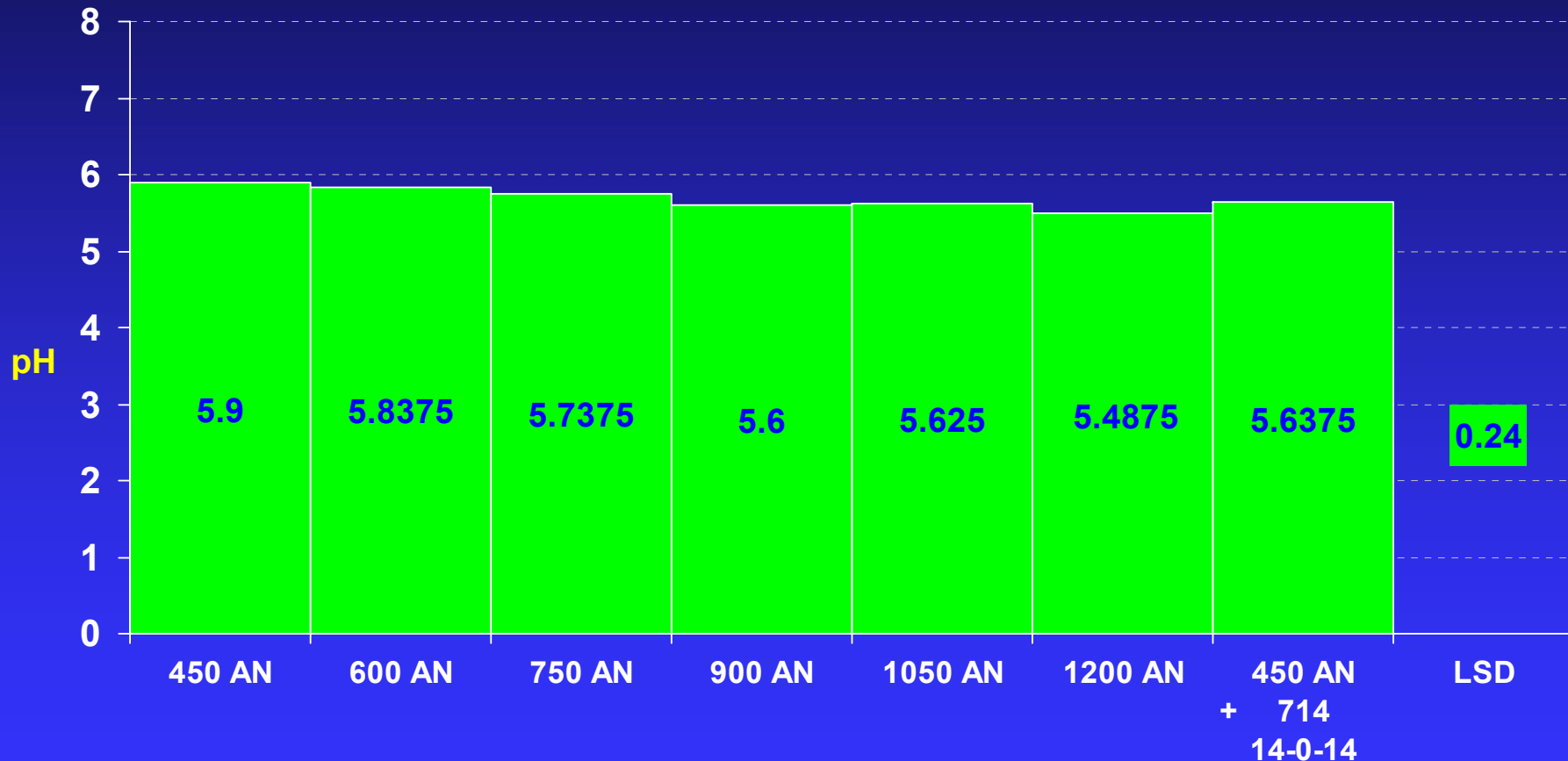
Effects of Nitrogen Rate on Burley Cured Leaf Chemistry Across 4 Locations



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix. Nitrates could not be analyzed across locations due to treatment*location interactions

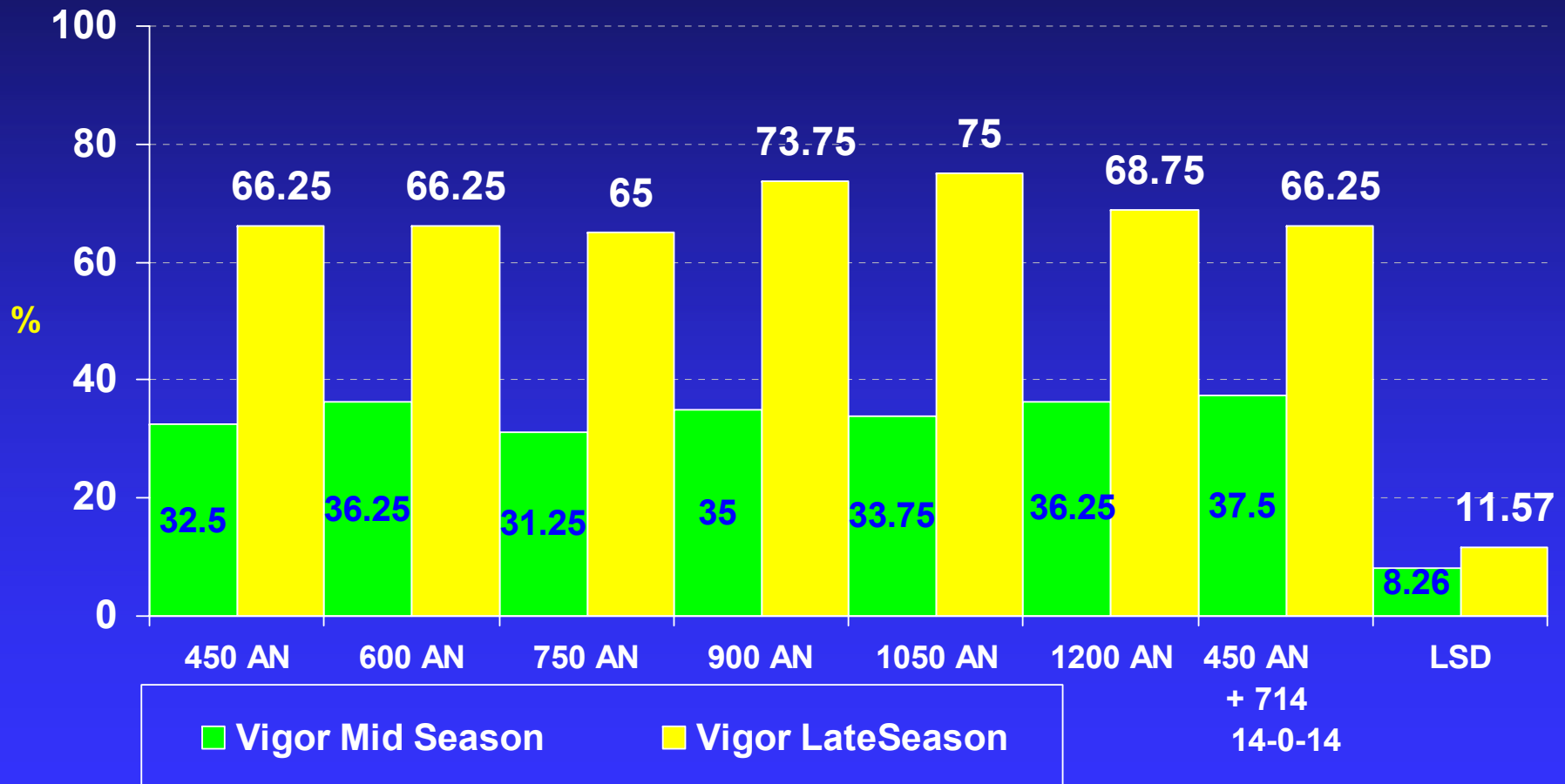
Effects of Nitrogen Rate on Soil pH

Fayette Co. – John Mahan Farm



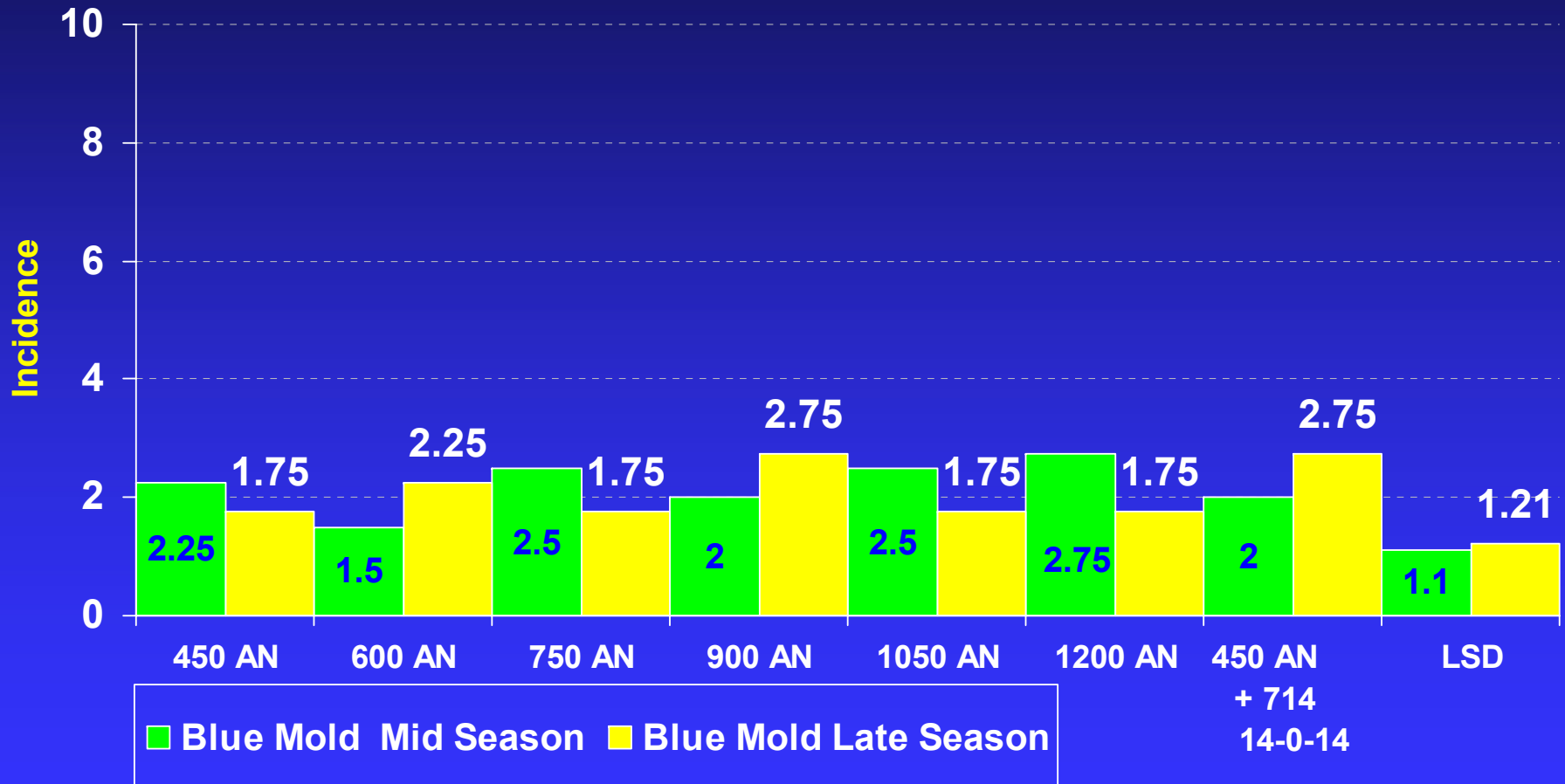
All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate.

Effects of Nitrogen Rate on Burley Vigor Fayette Co. – John Mahan Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate.

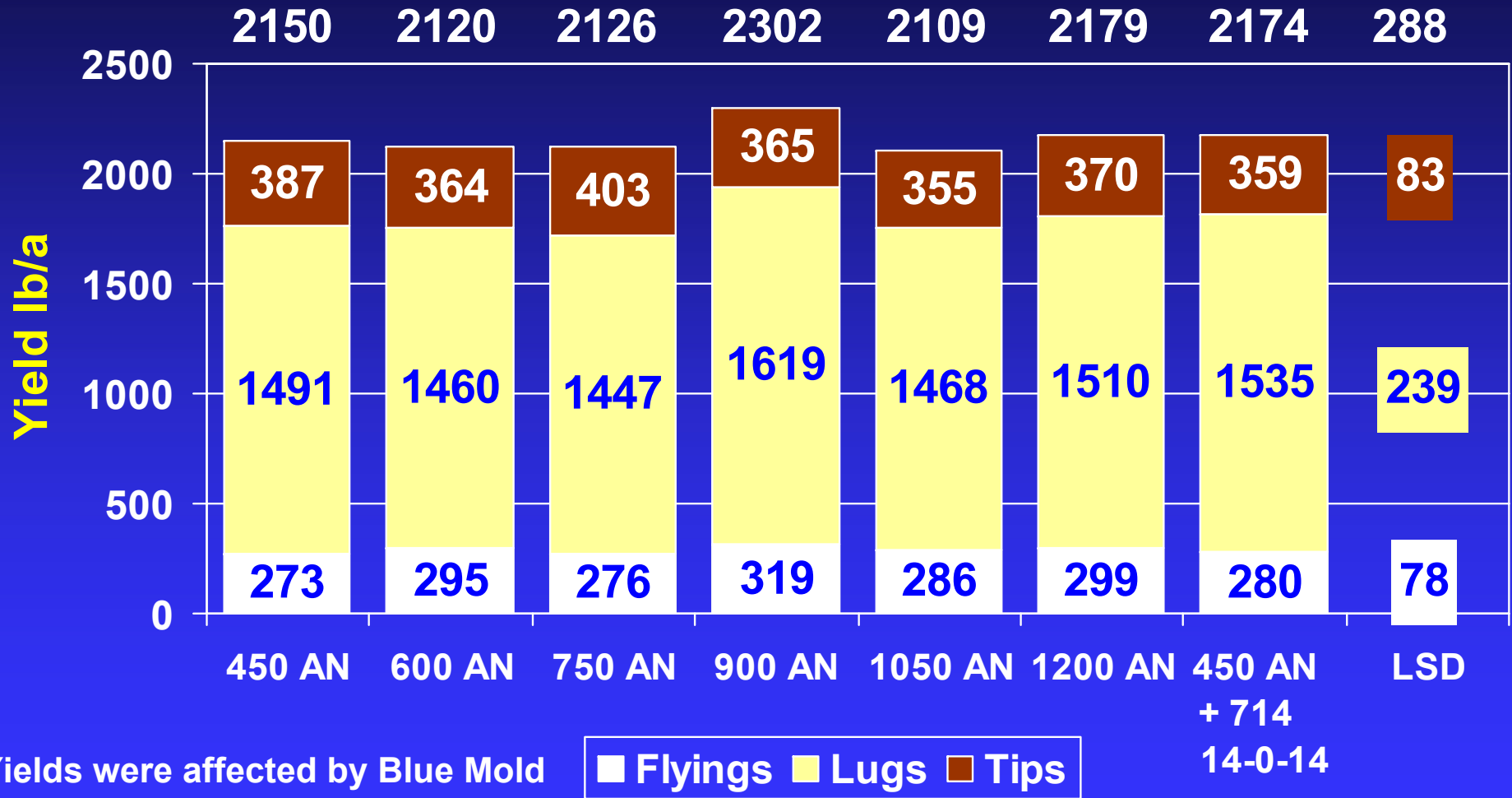
Effects of Nitrogen Rate on Blue Mold Fayette Co. – John Mahan Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate Scale is 0 best – 10 worst.

Effects of Nitrogen Rate on Burley Yield

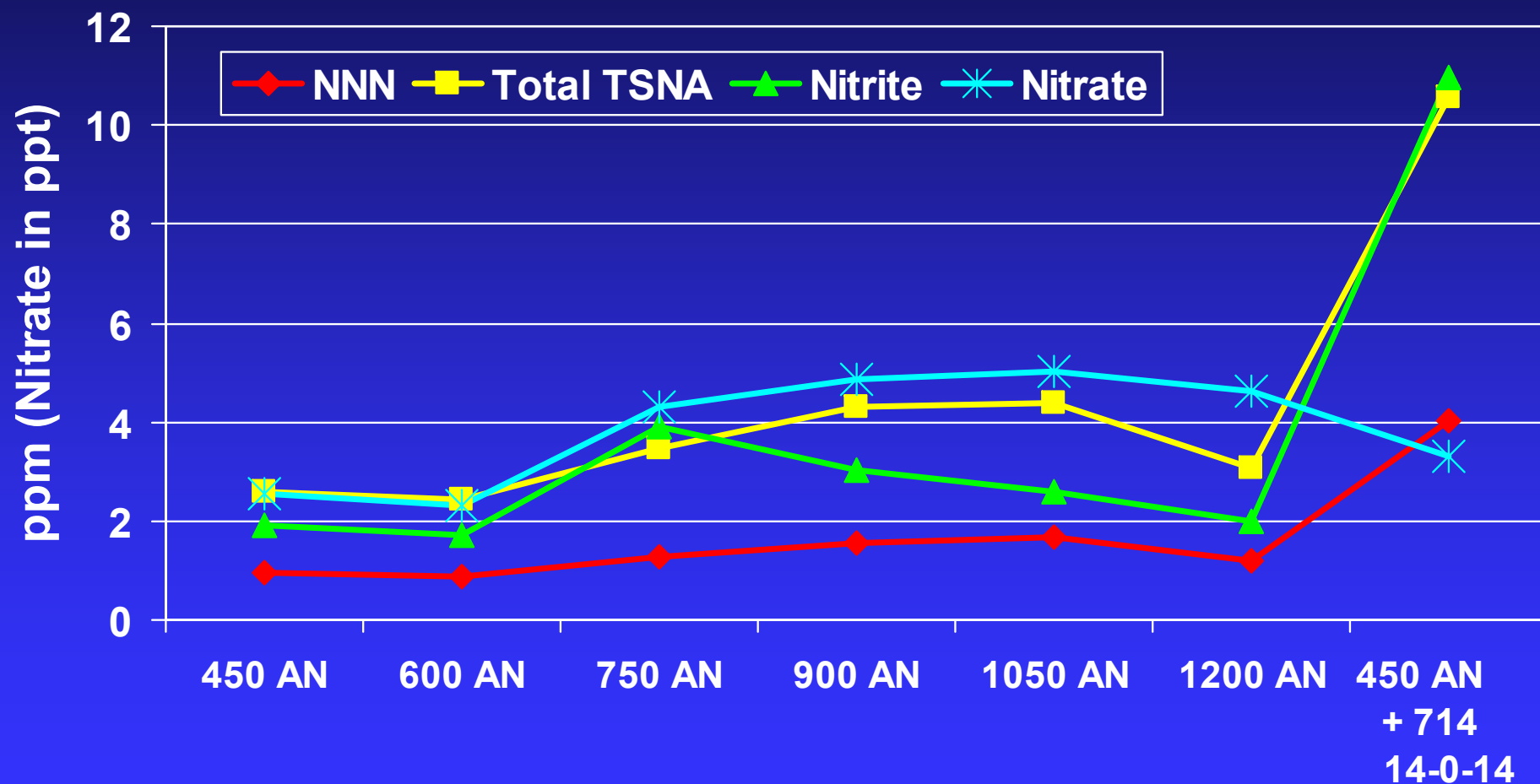
Fayette Co. – John Mahan Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix

Effects of Nitrogen Rate on Burley Cured Leaf Chemistry

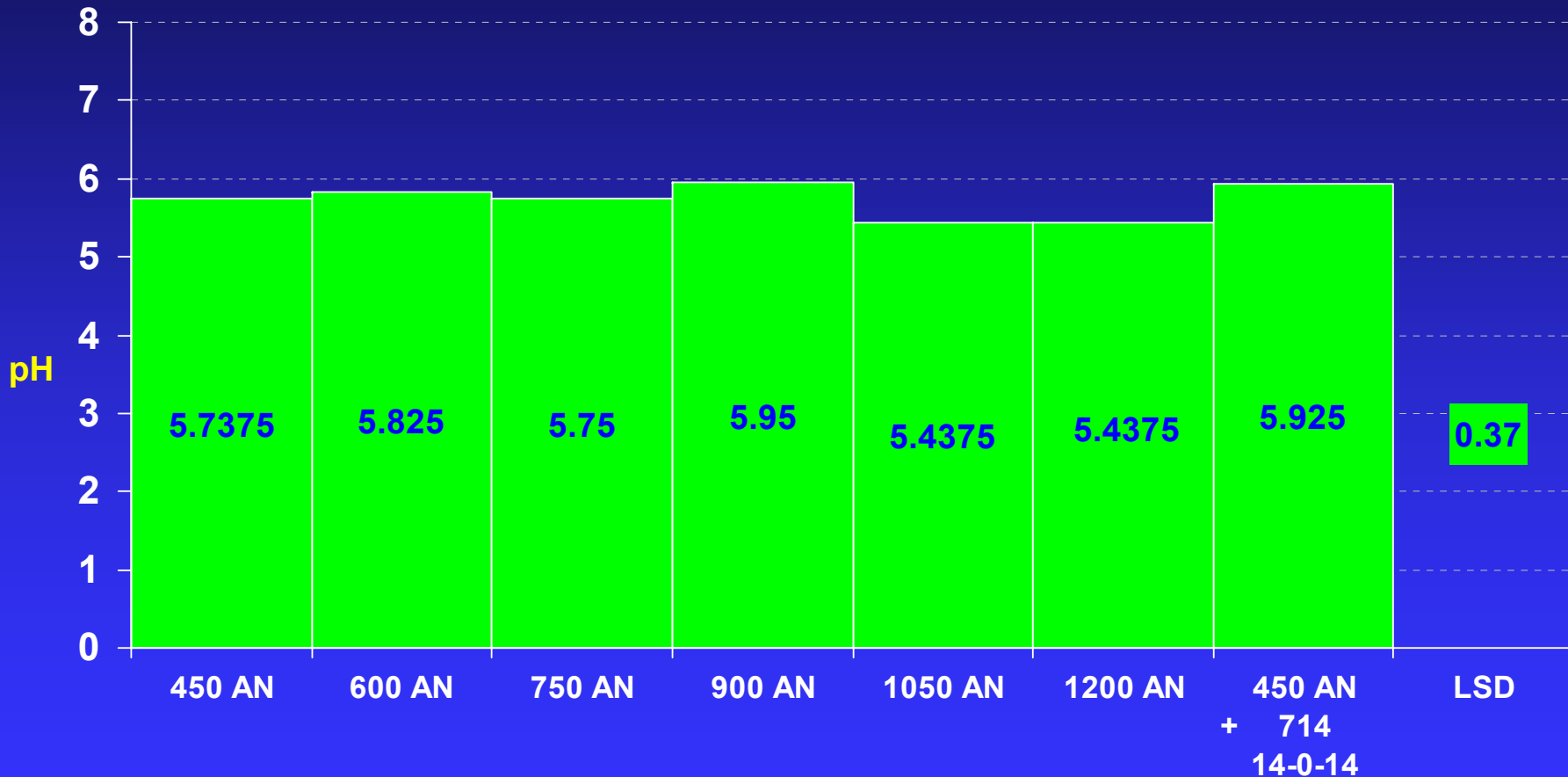
Fayette Co. – John Mahan Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix

Effects of Nitrogen Rate on Soil pH

Jackson Co. – Jerry Neeley Farm

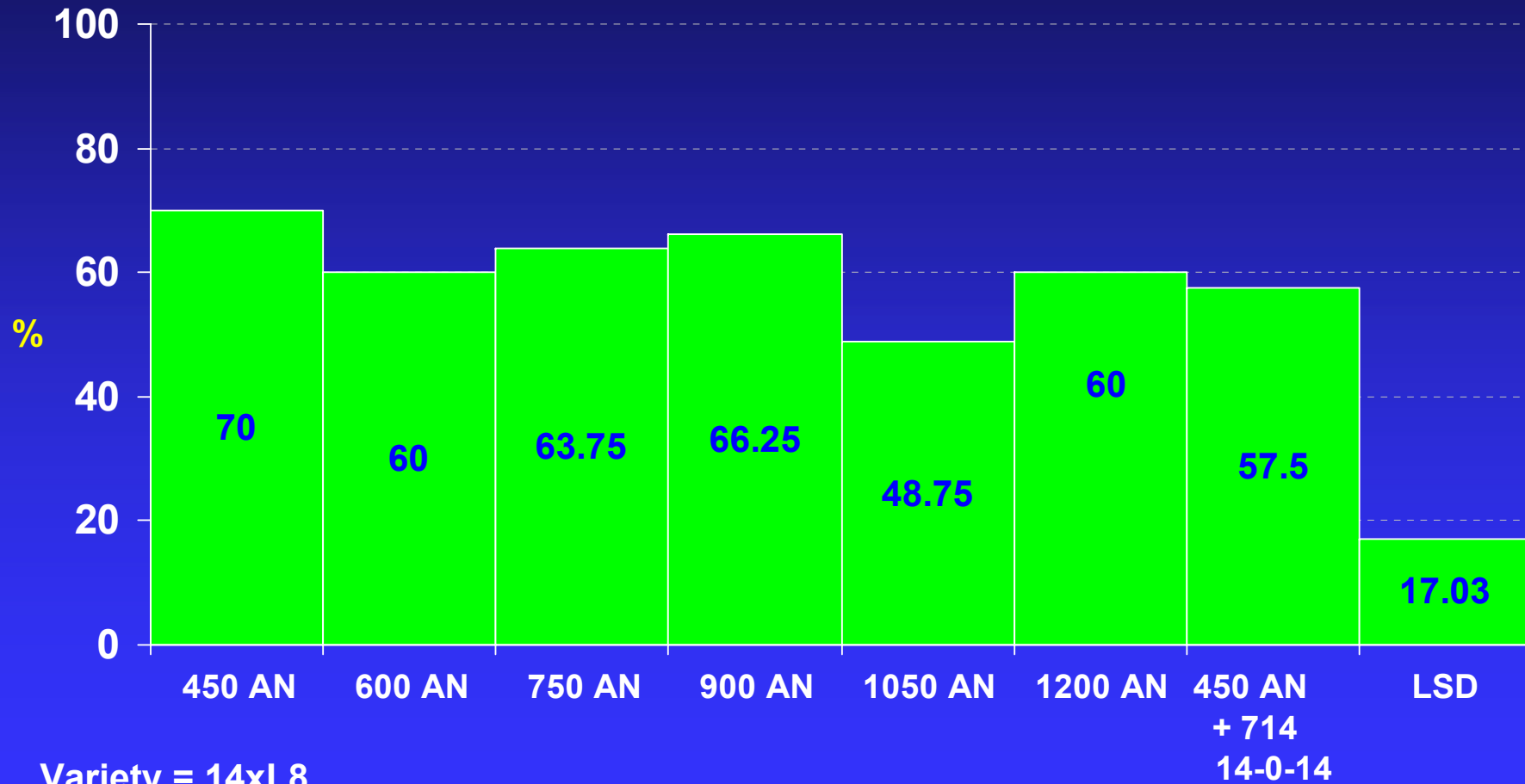


Variety = 14xL8

All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate.

Effects of Nitrogen Rate on Early Season Burley Vigor

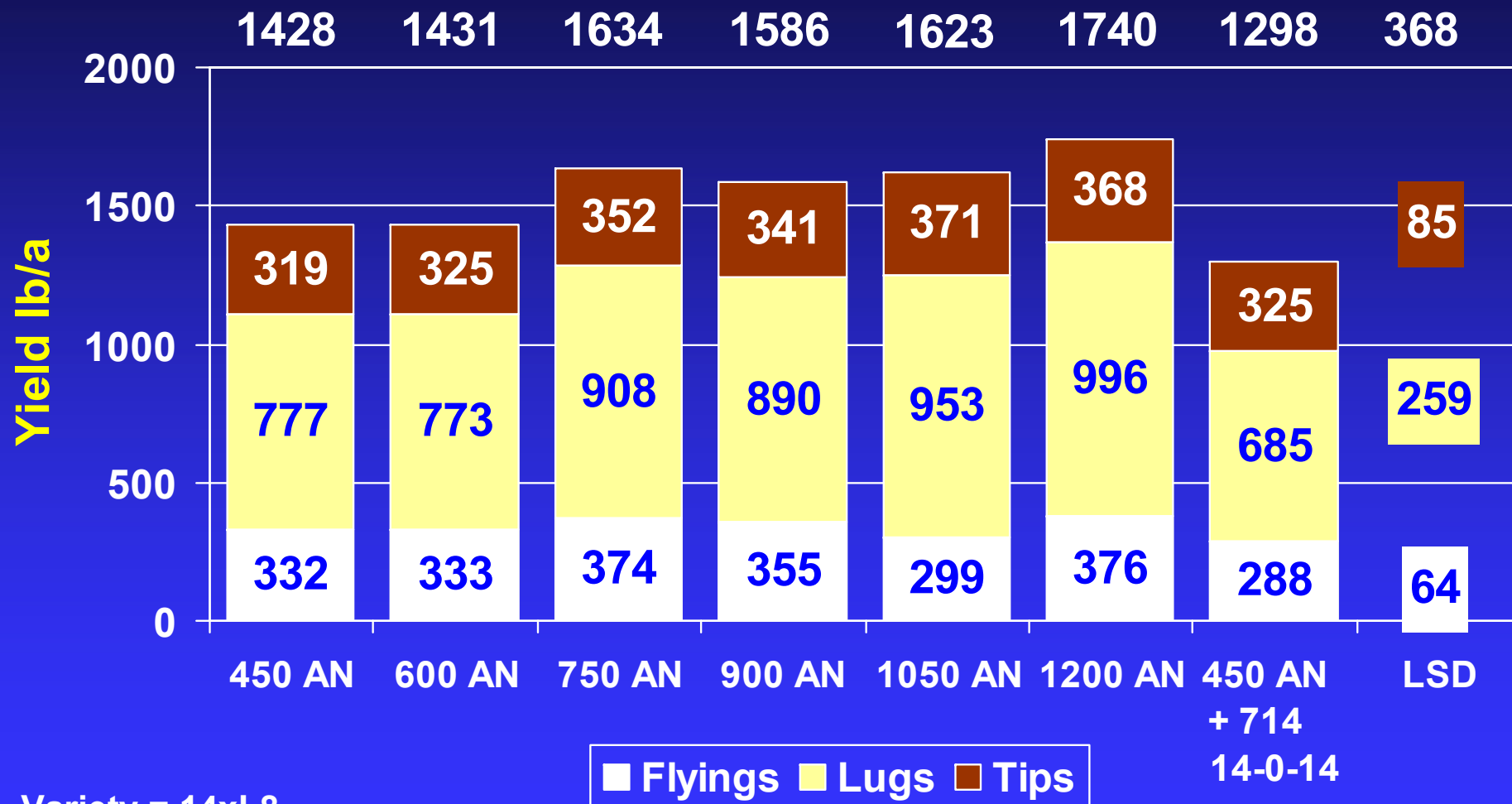
Jackson Co. – Jerry Neeley Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate, MS=mid-season, LS=late season.

Effects of Nitrogen Rate on Burley Yield

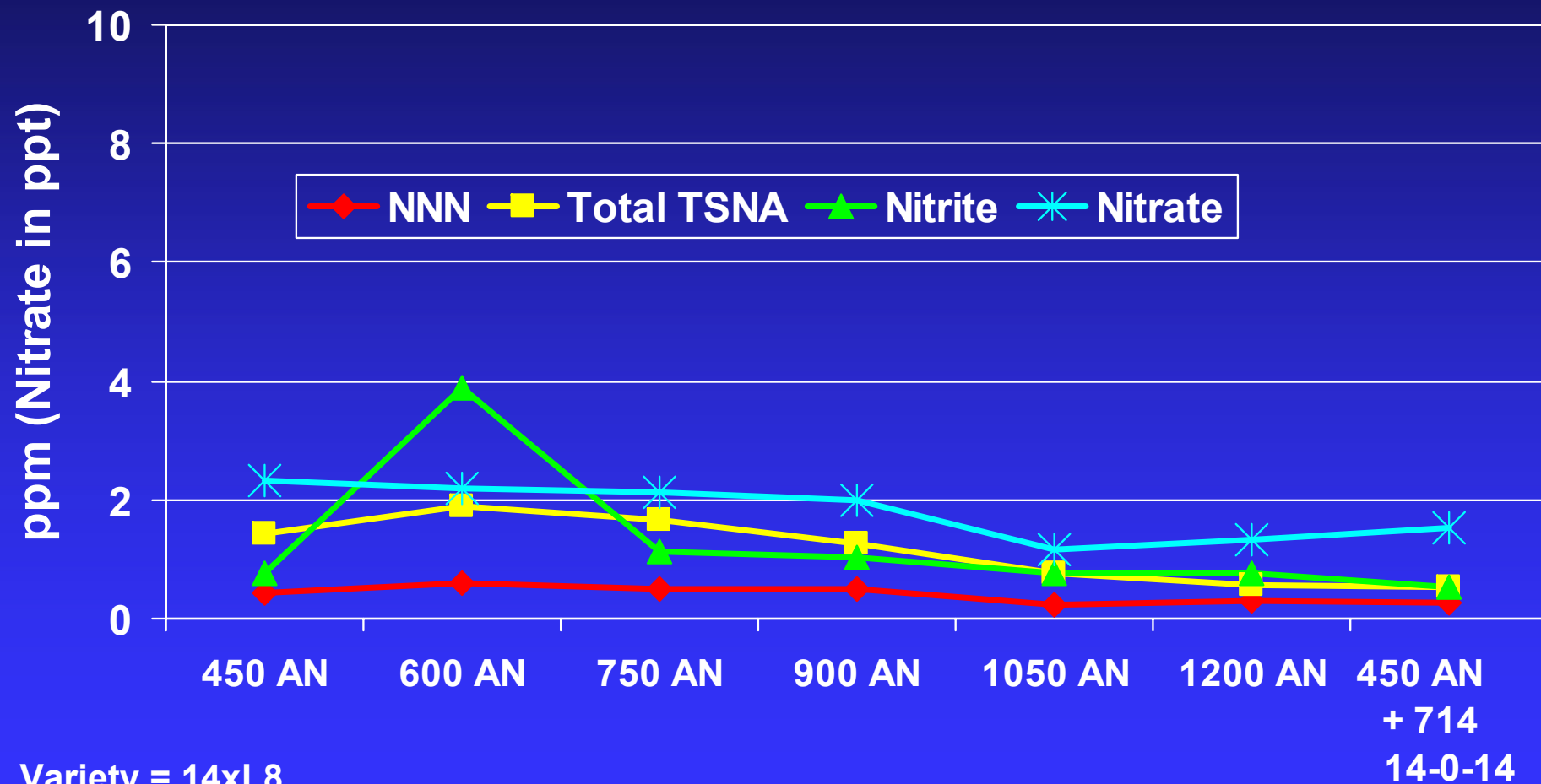
Jackson Co. – Jerry Neeley Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix

Effects of Nitrogen Rate on Burley Cured Leaf Chemistry

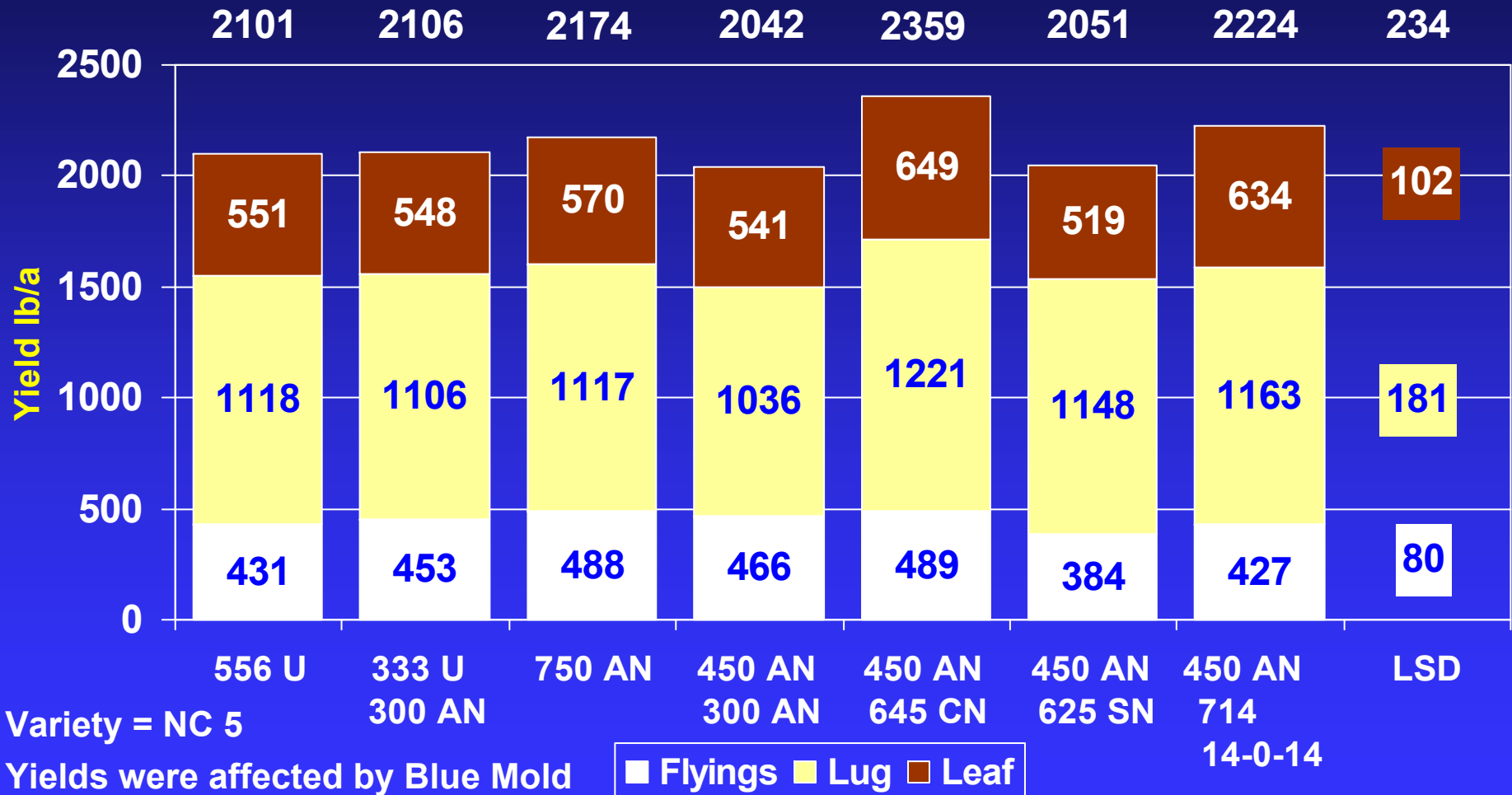
Jackson Co. – Jerry Neeley Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix

Effects of Nitrogen Source on Burley Yield

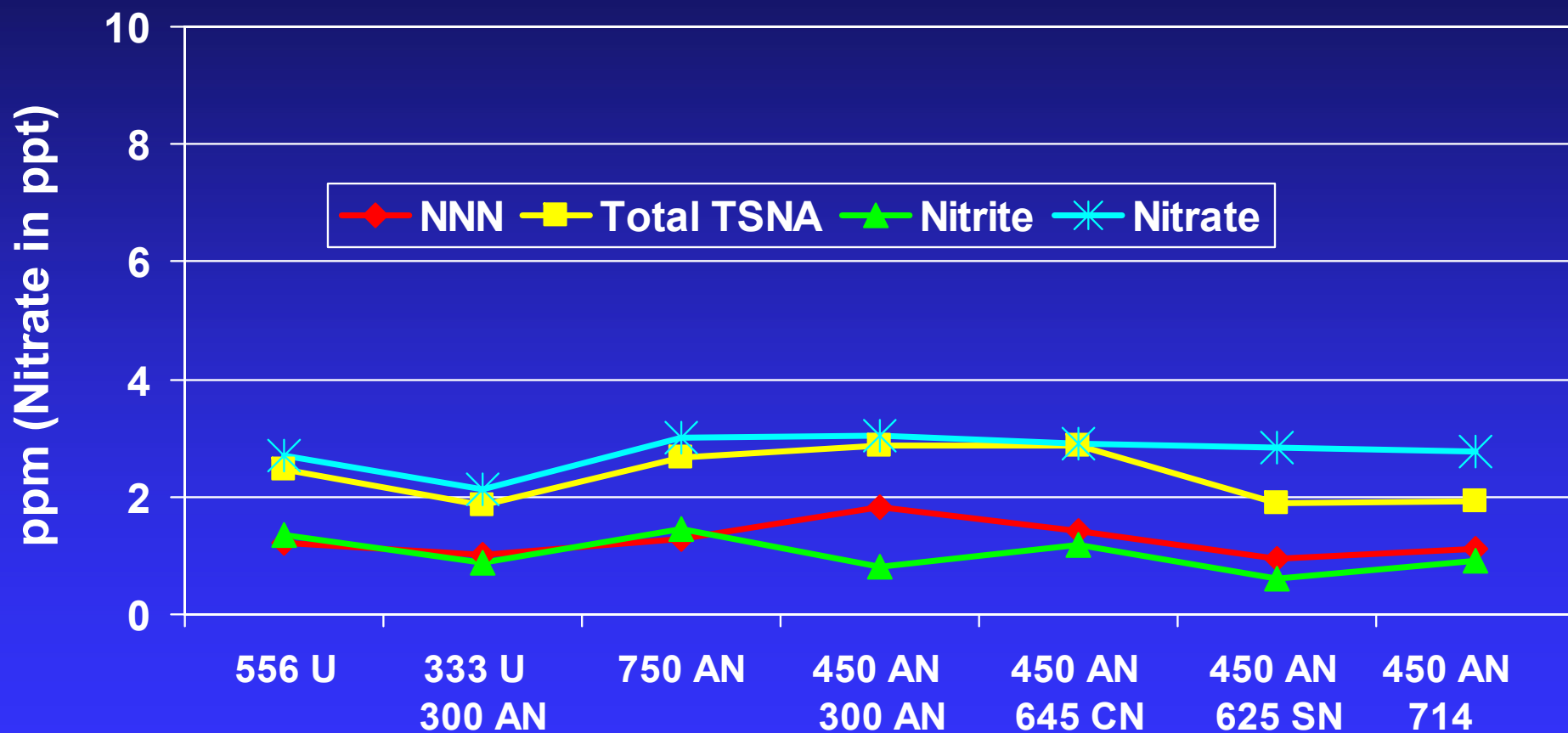
Lincoln Co. – Dan Cooper Farm



Number = lb/a, U = Urea, AN = Ammonium Nitrate, CN=Calcium Nitrate, SN = Sodium Nitrate
14-0-14 is a calcium & potassium nitrate mix. Initial nitrogen was broadcast with addition sidedressed

Effects of Nitrogen Rate on Burley Cured Leaf Chemistry

Lincoln Co. – Dan Cooper Farm



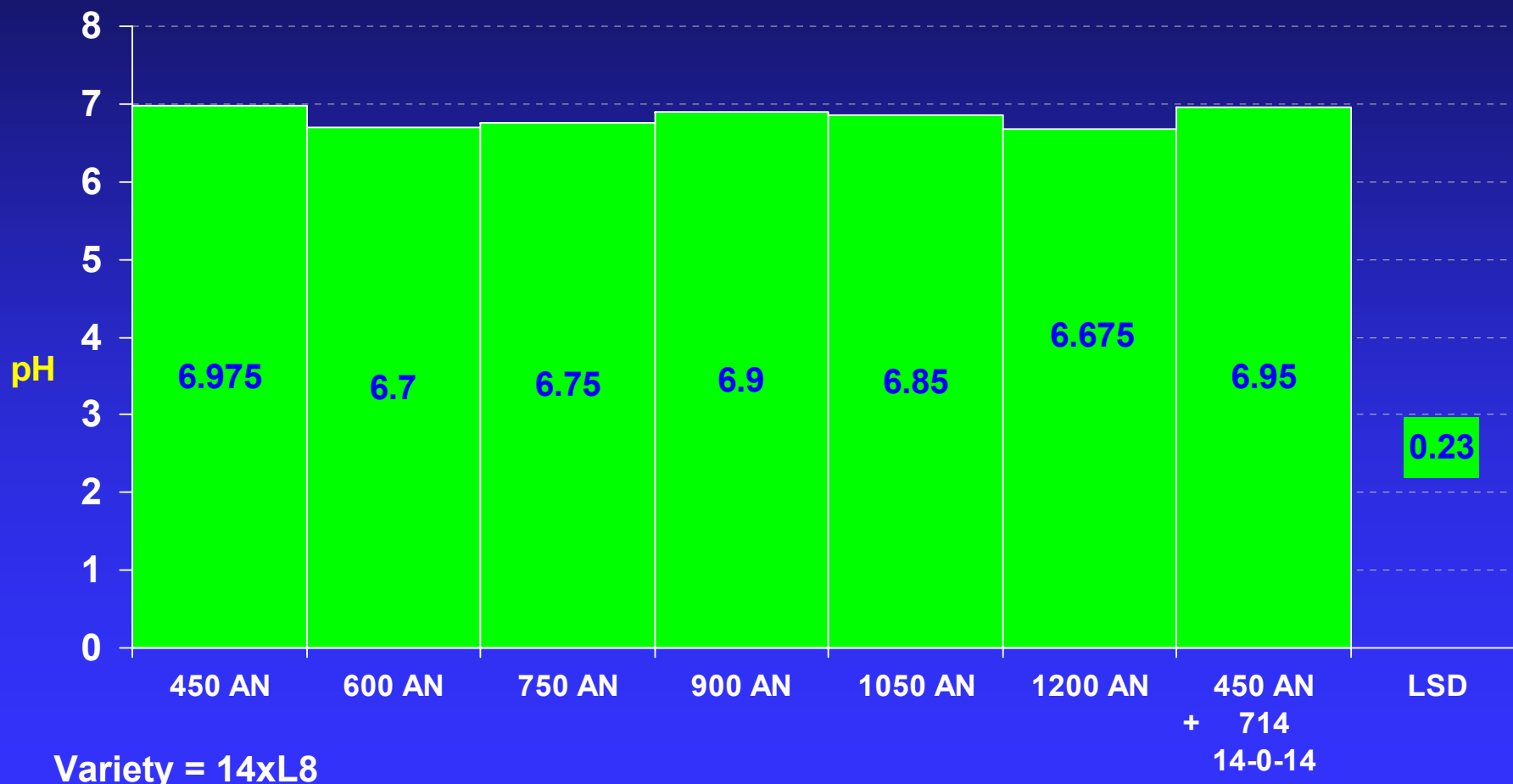
Variety = NC 5

14-0-14

All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix

Effects of Nitrogen Rate on Soil pH

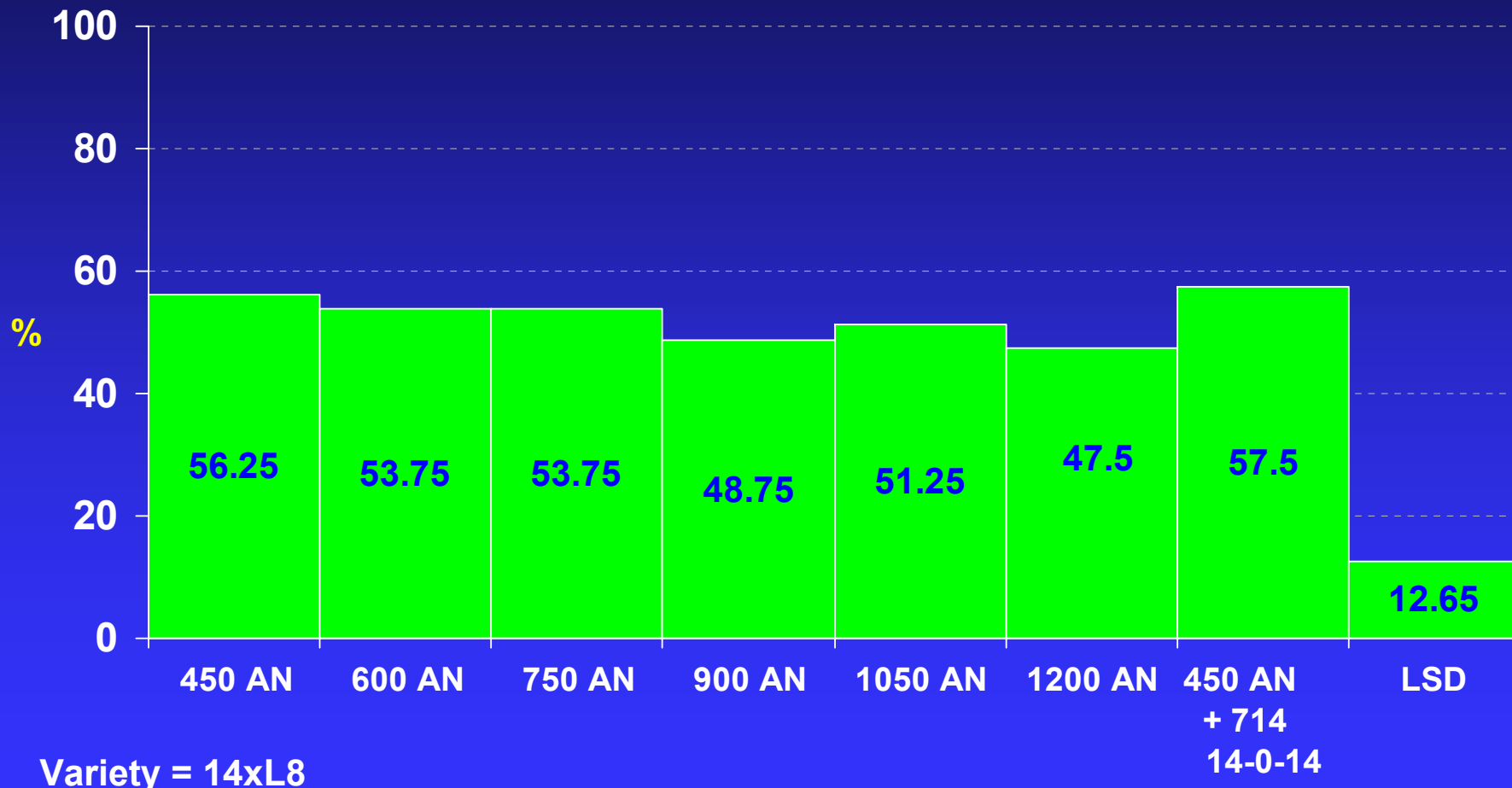
Madison Co. – Gregg Harris Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate.

Effects of Nitrogen Rate on Early Season Burley Vigor

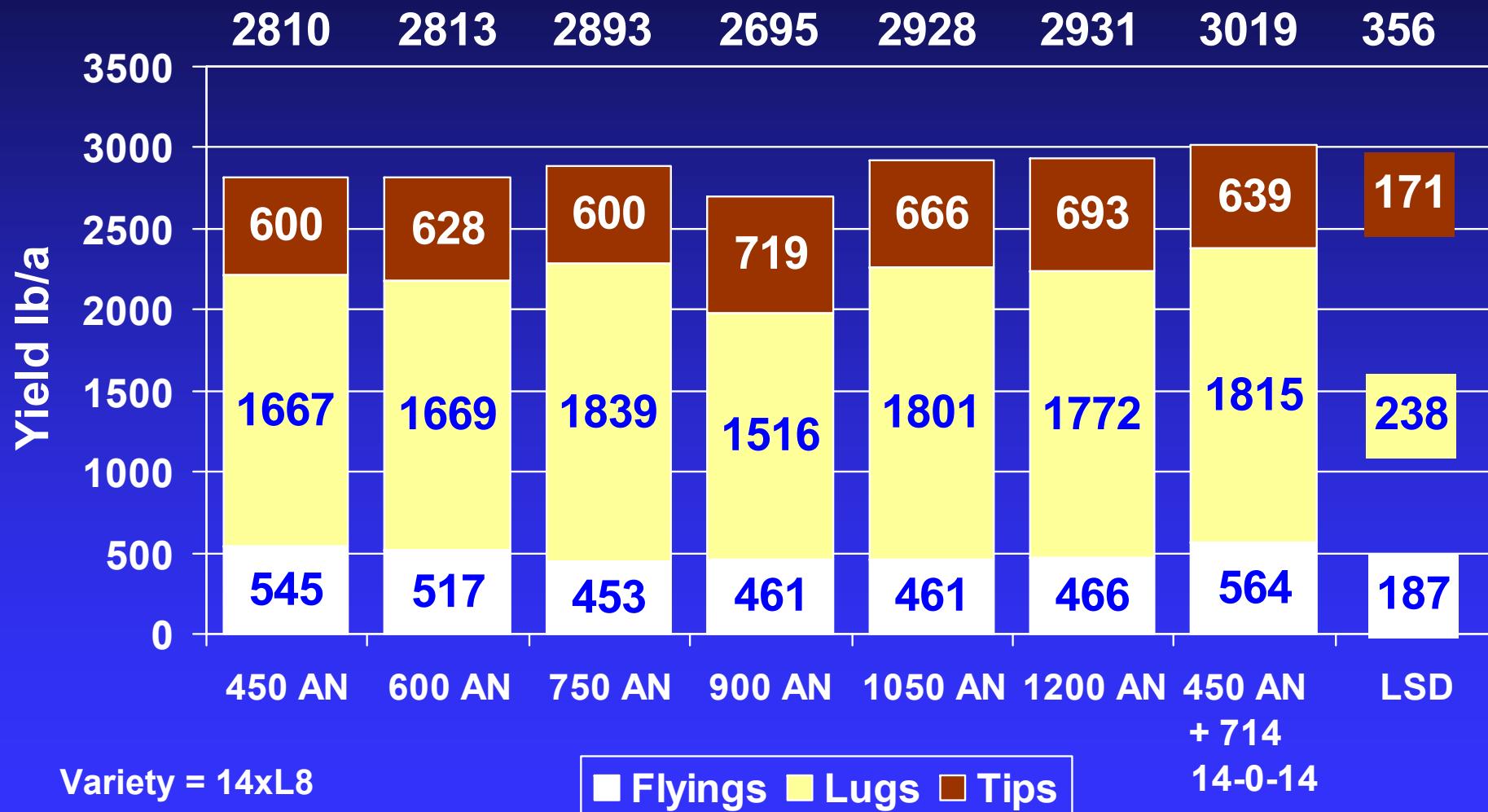
Madison Co. – Gregg Harris Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate.

Effects of Nitrogen Rate on Burley Yield

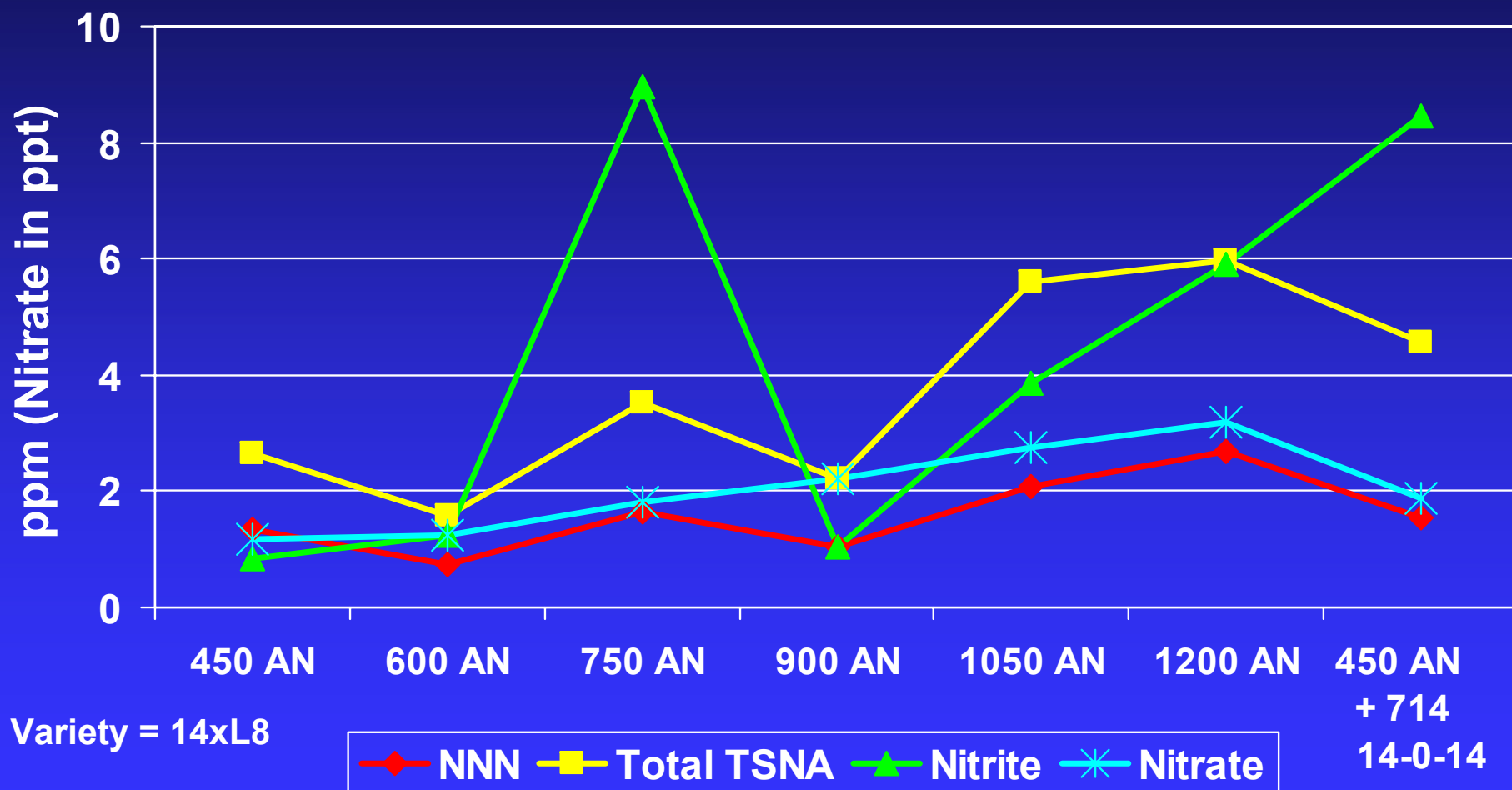
Madison Co. – Gregg Harris Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix

Effects of Nitrogen Rate on Burley Cured Leaf Chemistry

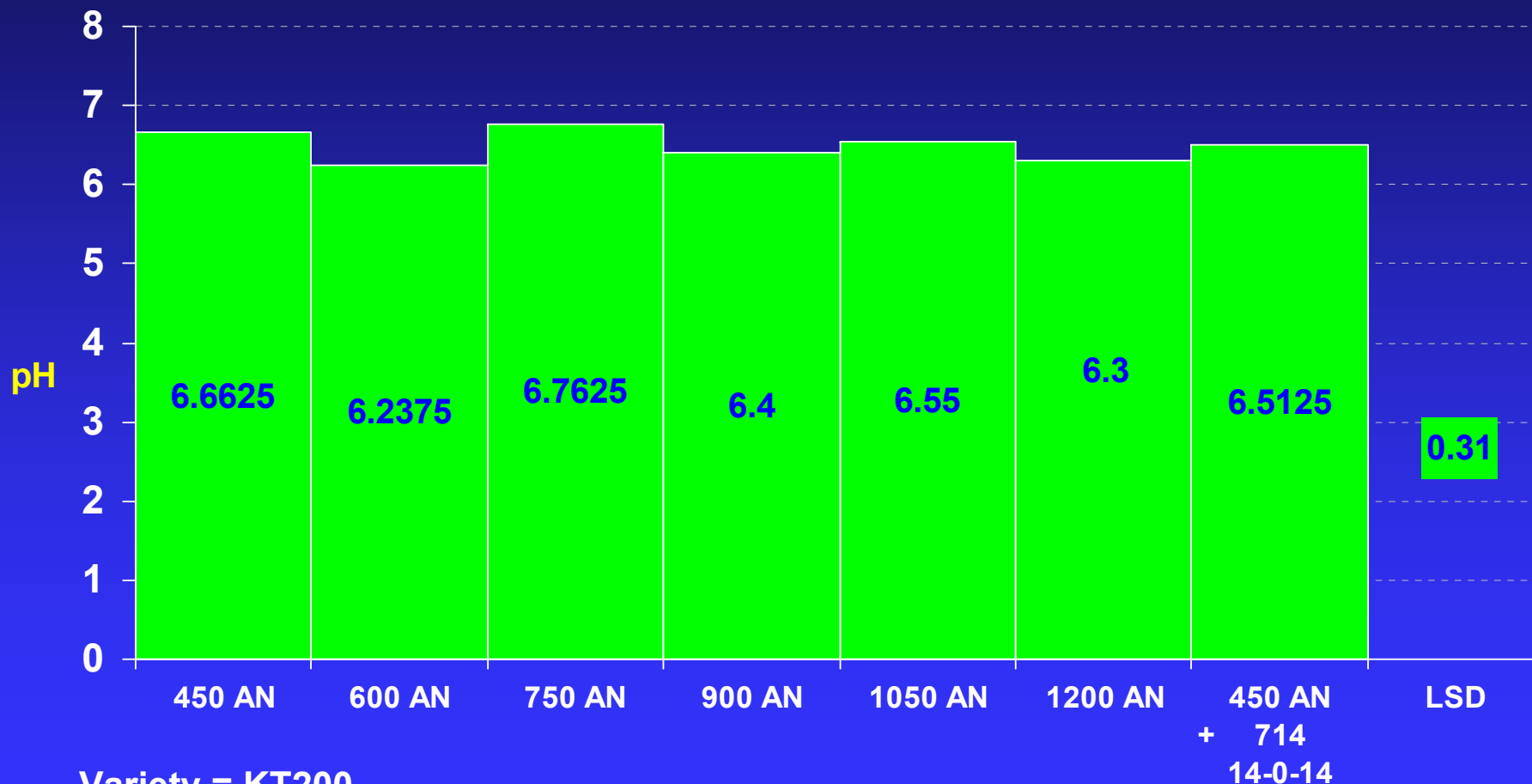
Madison Co. – Gregg Harris Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix

Effects of Nitrogen Rate on Soil pH

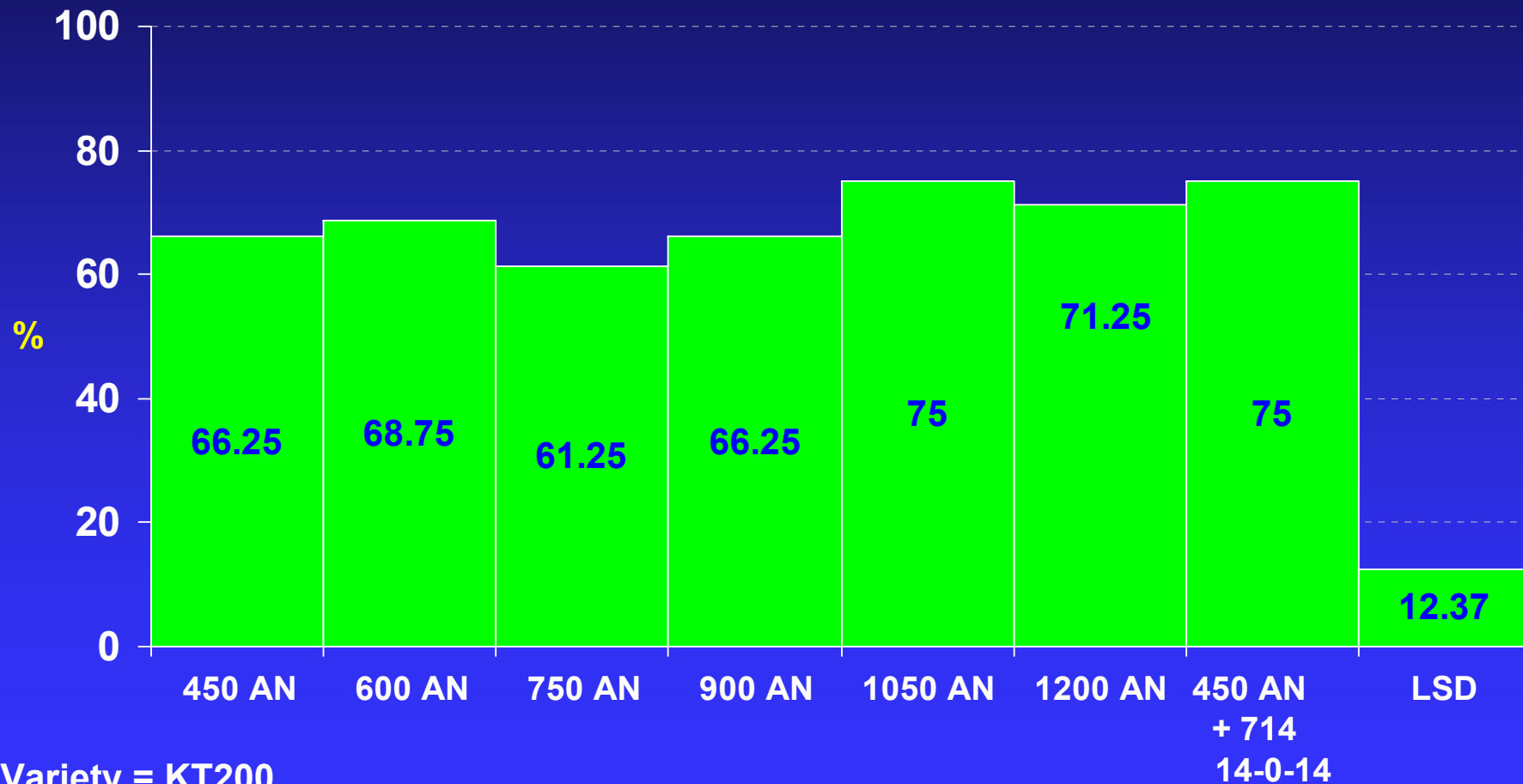
Shelby Co. – Ray Tucker, Jr. Farm



Variety = KT200

All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate.

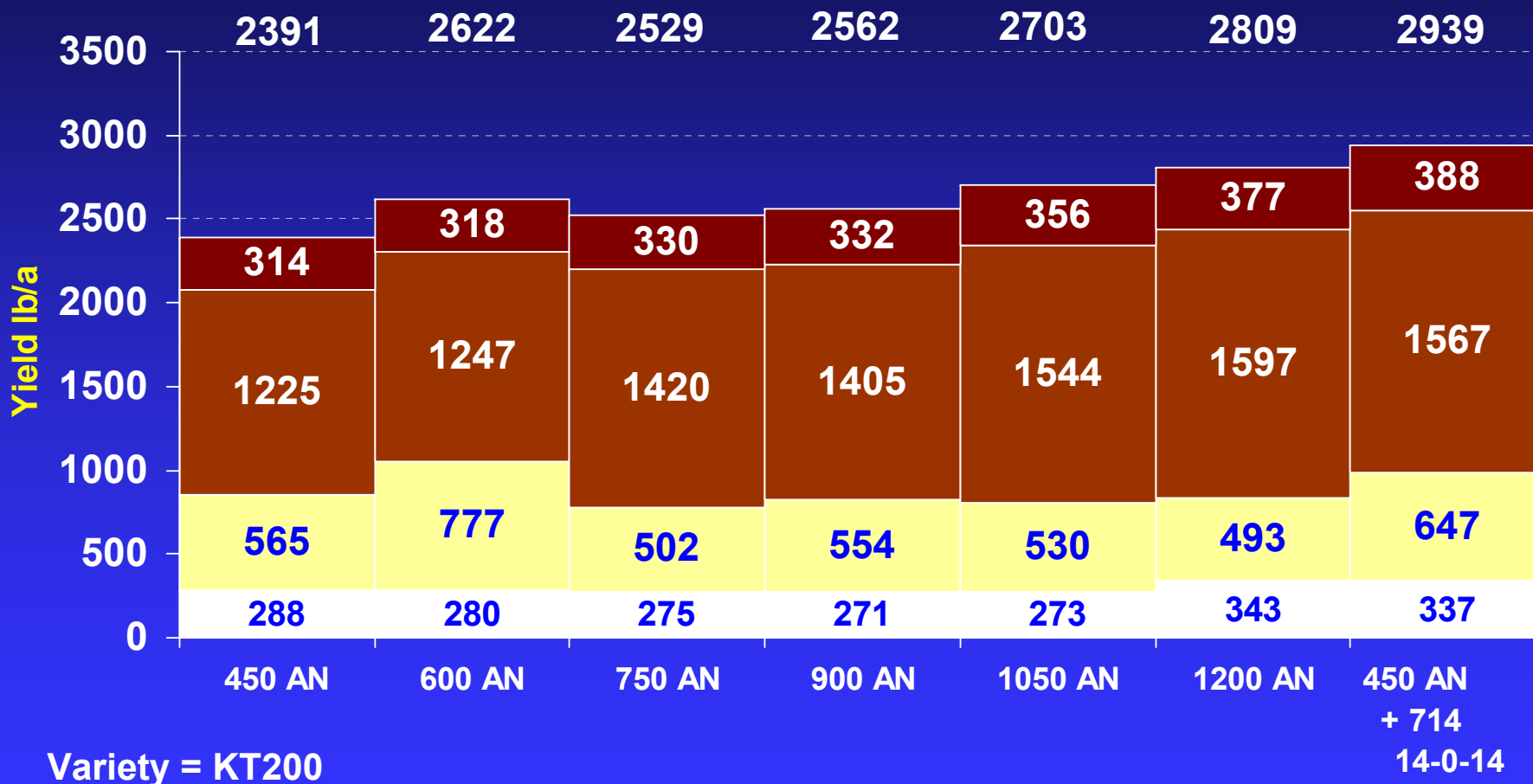
Effects of Nitrogen Rate on Early Season Burley Vigor Shelby Co. – Ray Tucker, Jr. Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate.

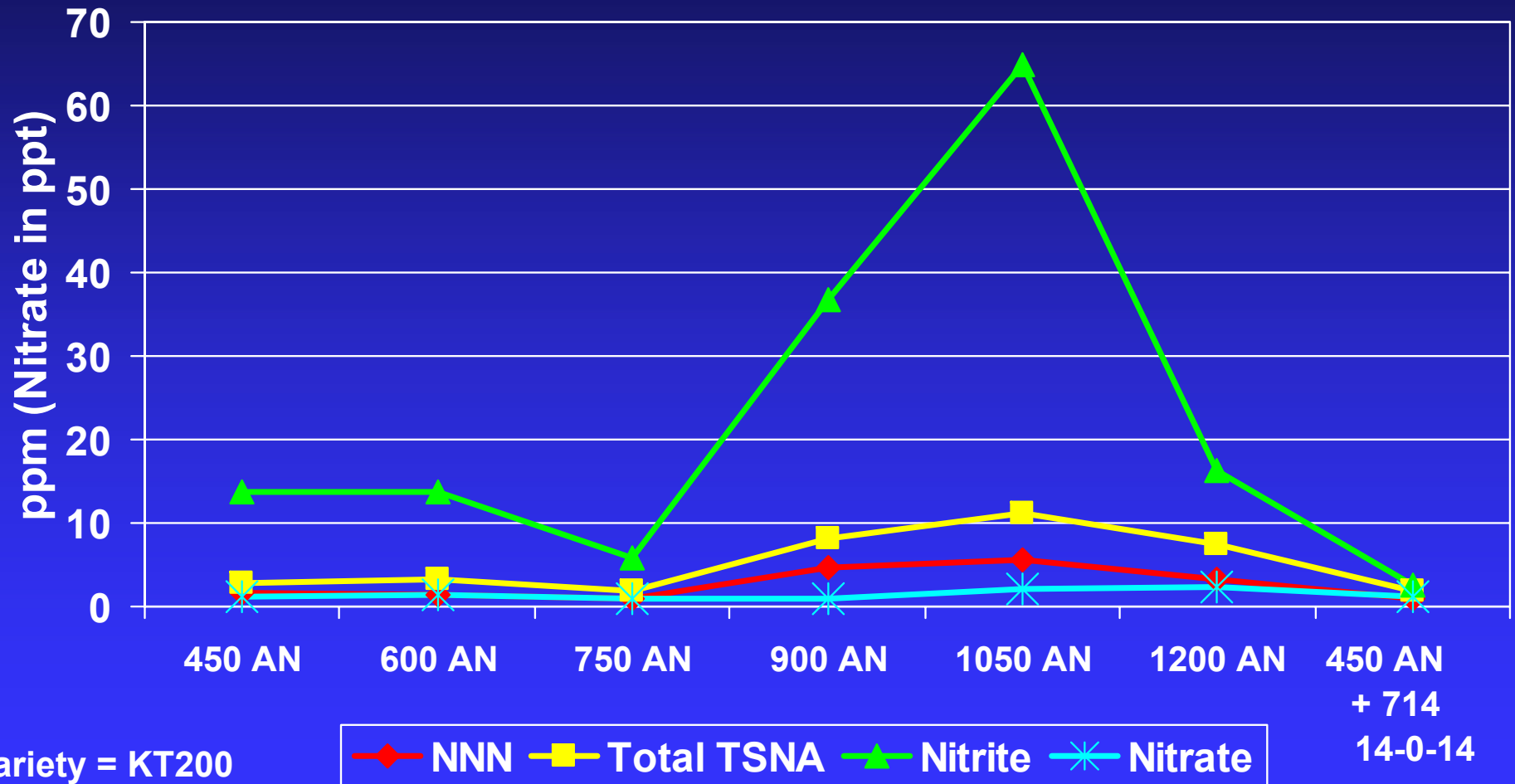
Effects of Nitrogen Rate on Burley Yield

Shelby Co. – Ray Tucker, Jr. Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. LSD not available due to missing Value. However, adding 714 lb/a 14-0-14 significantly improved yield over 450 lb/a alone

Effects of Nitrogen Rate on Burley Cured Leaf Chemistry Shelby Co. – Ray Tucker, Jr. Farm



All plots received 450 lb/a Ammonium Nitrate Broadcast followed by the remainder of the nitrogen shortly after transplanting. AN = Ammonium Nitrate. 14-0-14 is a calcium/potassium nitrate mix