

**Objective:** Crop yield comparison between ammonium nitrate and SUSTAIN®

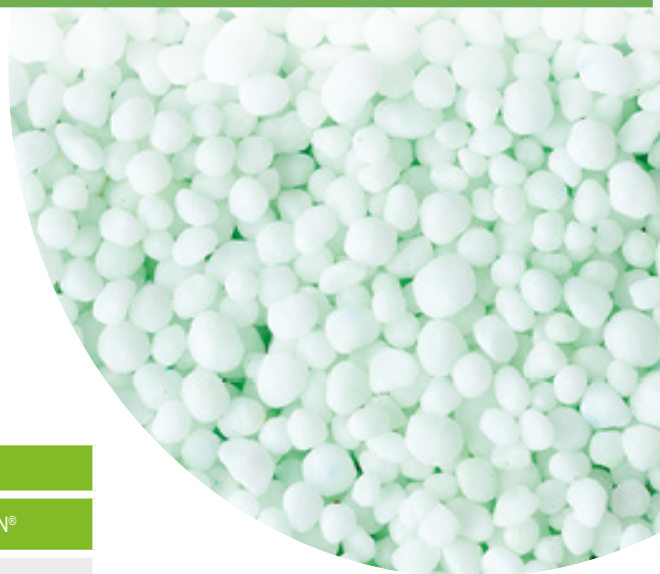
**Crop:** Sugar Beet (Cayman)

**Location:** Kirton, Suffolk

**Date:** 2015 Harvest

**Researcher:** Envirofields

**Trial code:** RD99\_005\_SB\_15

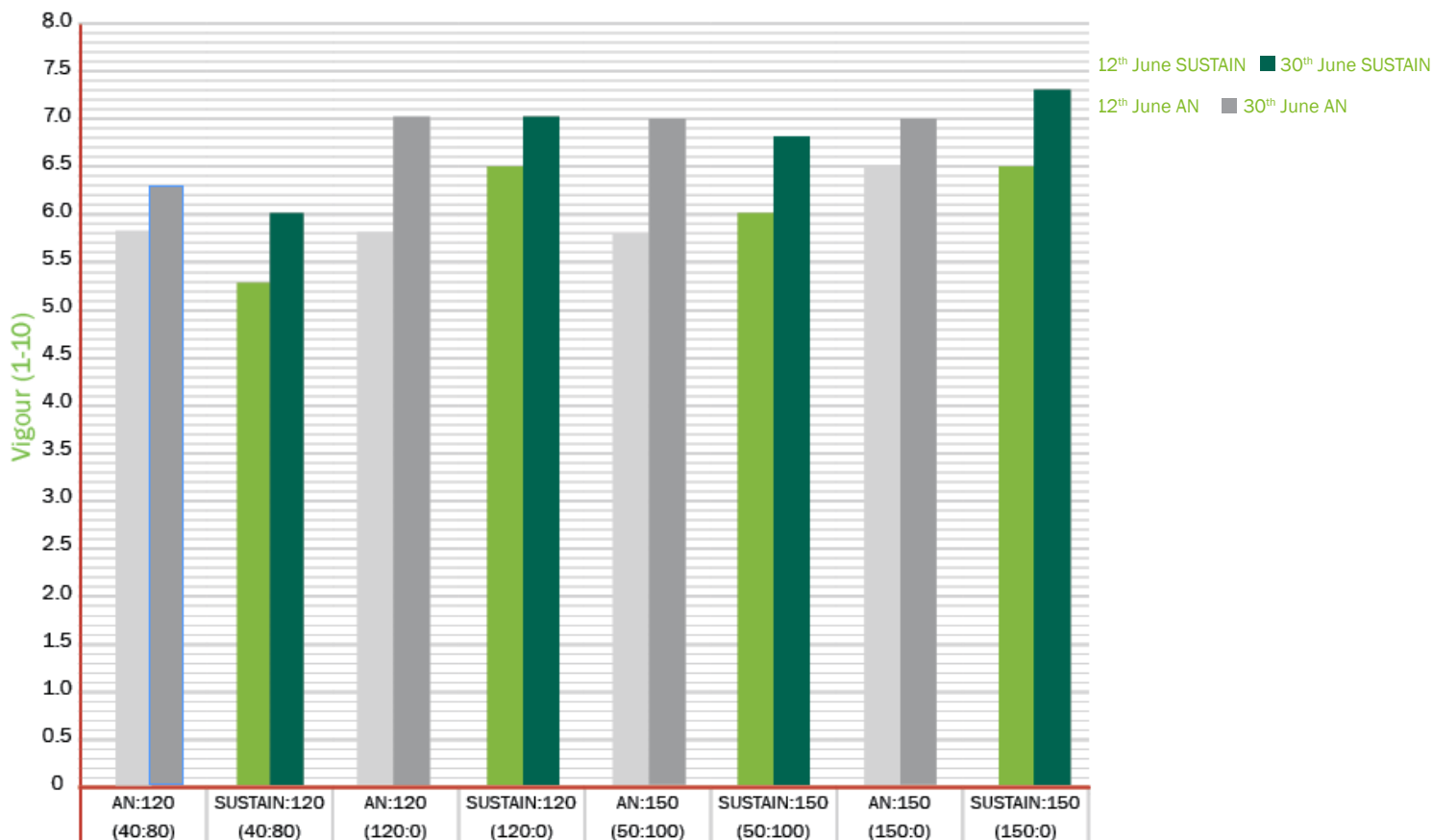


## Treatments:

Total N rate (kg N/ha) programme*	Nutrient timing*	Product Required (kg/Ha)	
		Ammonium Nitrate	SUSTAIN®
120	40:80	348	261
120	120:0	348	261
150	50:100	435	326
150	150:0	435	326

\*Application splits; at planting and shortly after emergence

## Results: Vigour 12th June 2015 & 30th June 2015, Envirofields, Kirton, Suffolk



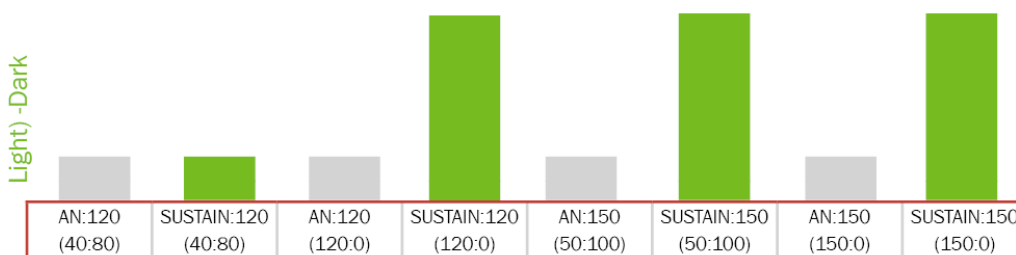
## Canopy development:

Early canopy development in the spring is essential for the sugar beet crop to optimise its solar radiation interception (and therefore sugar production).

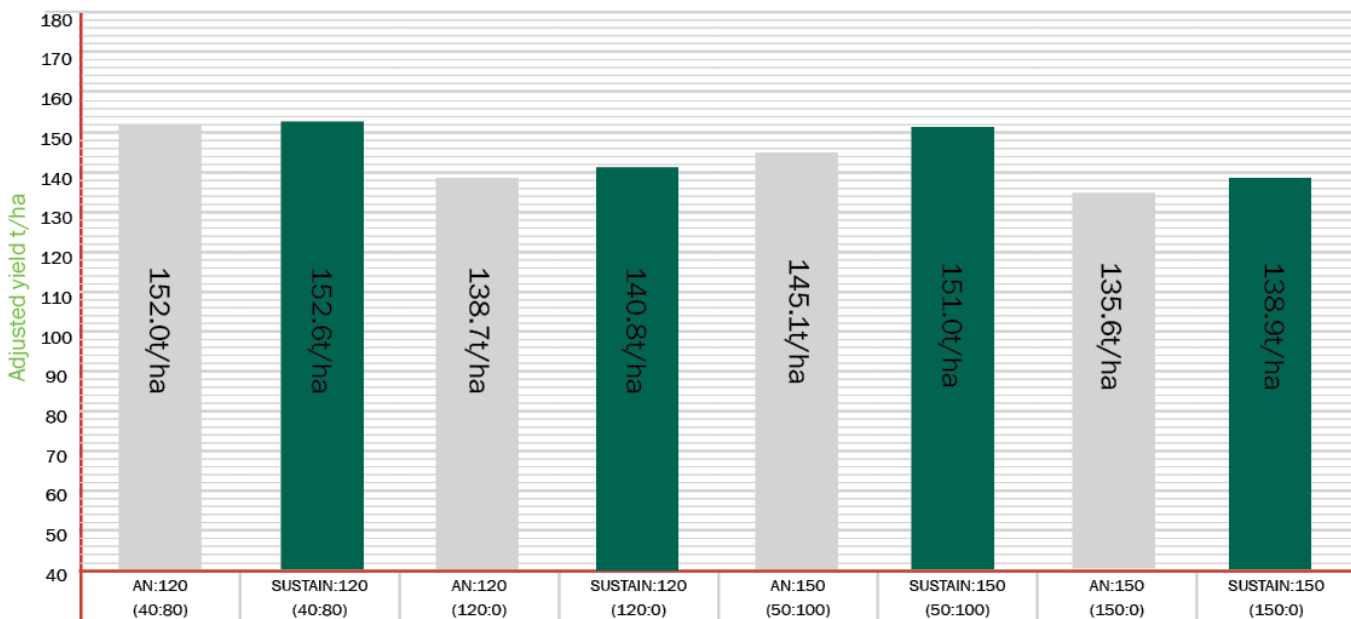
The SUSTAIN® fertiliser programme produced early crop vigour and colour equivalent to ammonium nitrate.



## Results colour: 30th June 2015, Envirofields, Kirton, Suffolk



## Results adjusted yield: N-types on Sugar Beet, Envirofields, Kirton, Suffolk, yield (t/ha)



## Conclusions:

- SUSTAIN® gave equal plant vigour and leaf colour compared to AN throughout the trial (including early season crop response).
- Averaged across all nitrogen rates and application regimes, SUSTAIN® gave adjusted yields 3 tonnes/ha greater than AN.
- The higher nitrogen content of SUSTAIN® means 33% less product is required to supply equal nitrogen compared to AN.