



Nitrogen use efficiency in *Brassica napus*

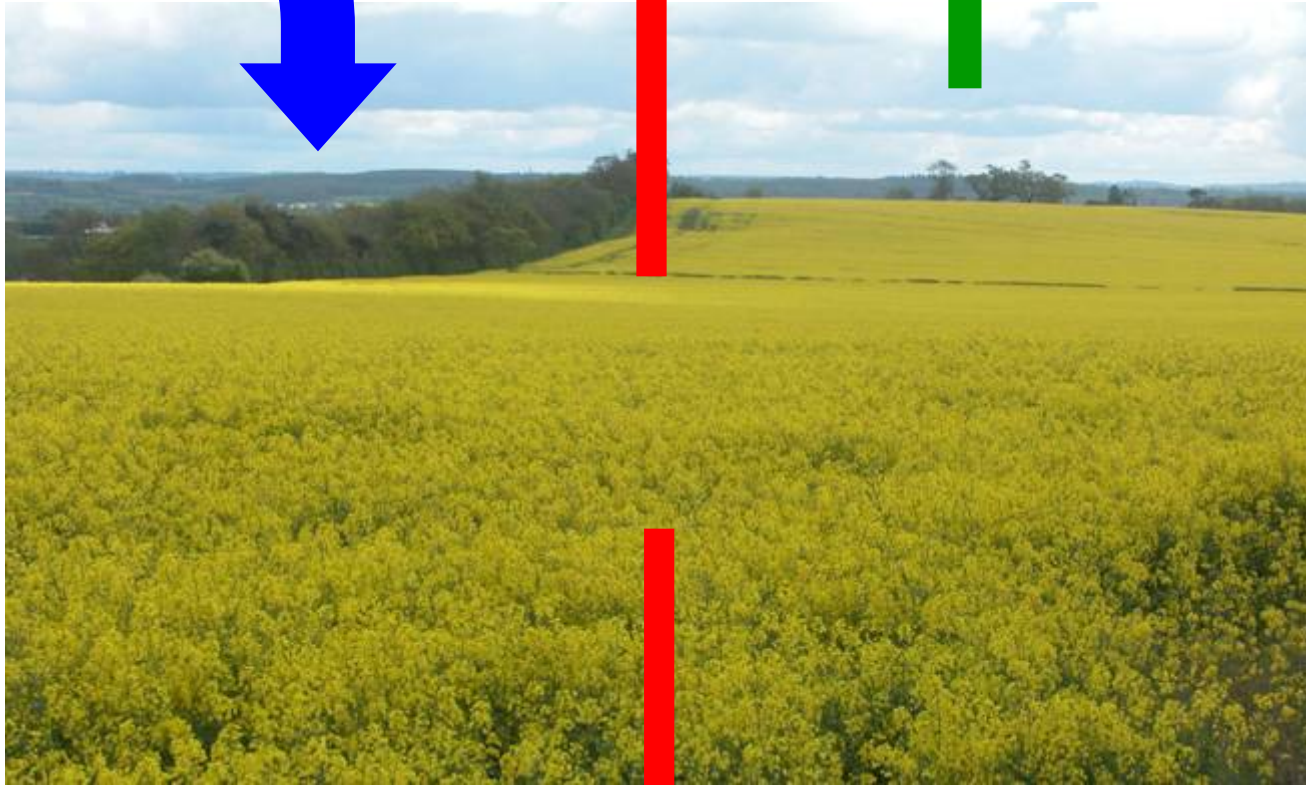
Graham Teakle
Warwick HRI



N fertilizer
(206 kg/ha)

GHG emissions
 N_2O and NH_3

N offtake
(96 kg/ha)



Pollution of water courses

83% of CO_2 equivalents
associated with production
due to N fertilisers



Breeding oilseed rape with a low requirement for nitrogen fertiliser (Defra LINK LK0979)

Project leader - Peter Berry (ADAS)



Elsoms Seeds



GrowHow



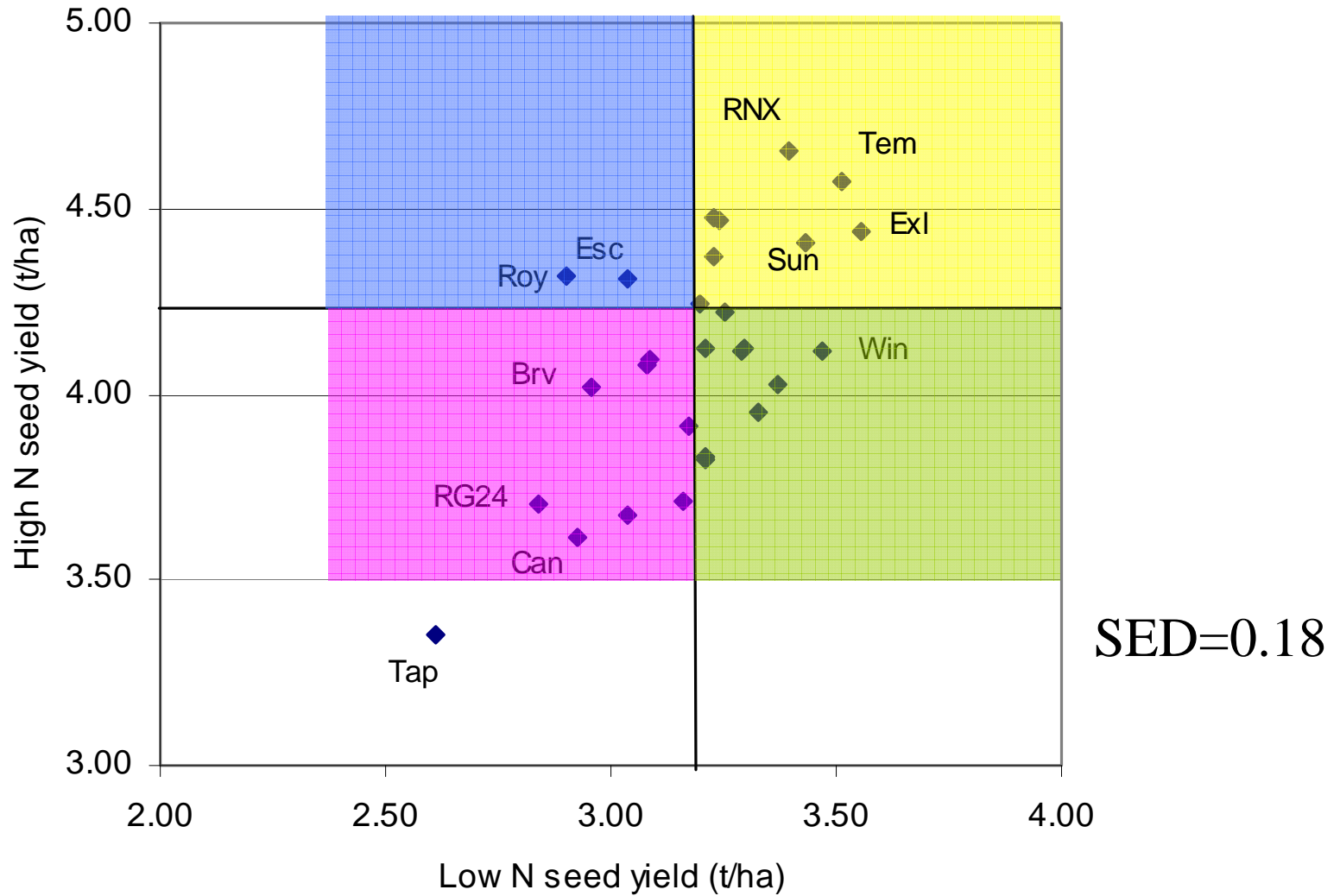
Northeast Biofuels



Project Specific Objectives

1. Develop a mechanistic model of N requirement in oilseed rape
2. Identify traits associated with low N requirement in UK oilseed rape varieties
3. Develop phenotypic screens and genetic markers for rapidly assessing the traits
4. Quantify the impact of different varieties on pollution, energy balance and growing costs

Cross site analysis



NFT Nitrogen uptake diversity experiment



24 Sept



19 Oct



26 Oct

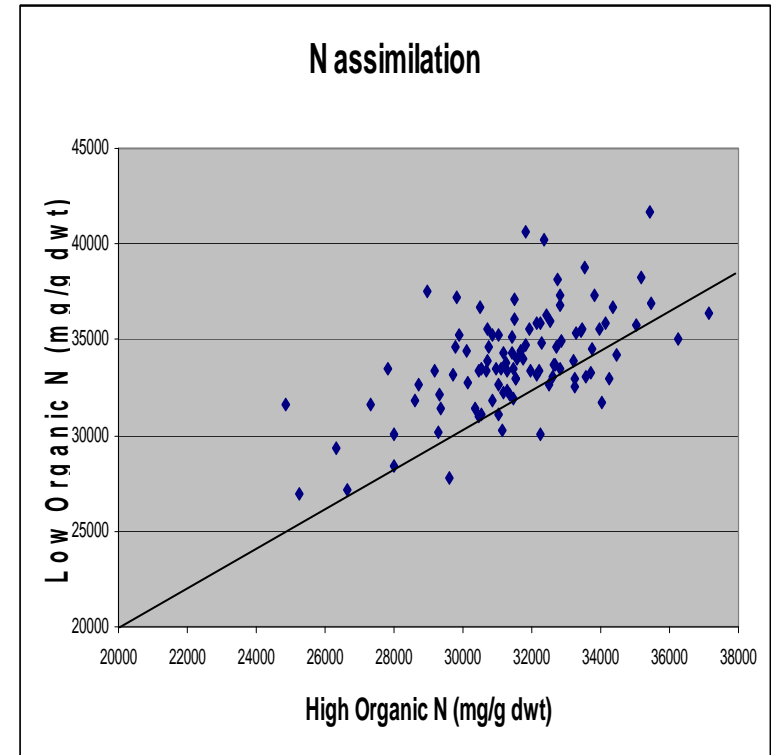
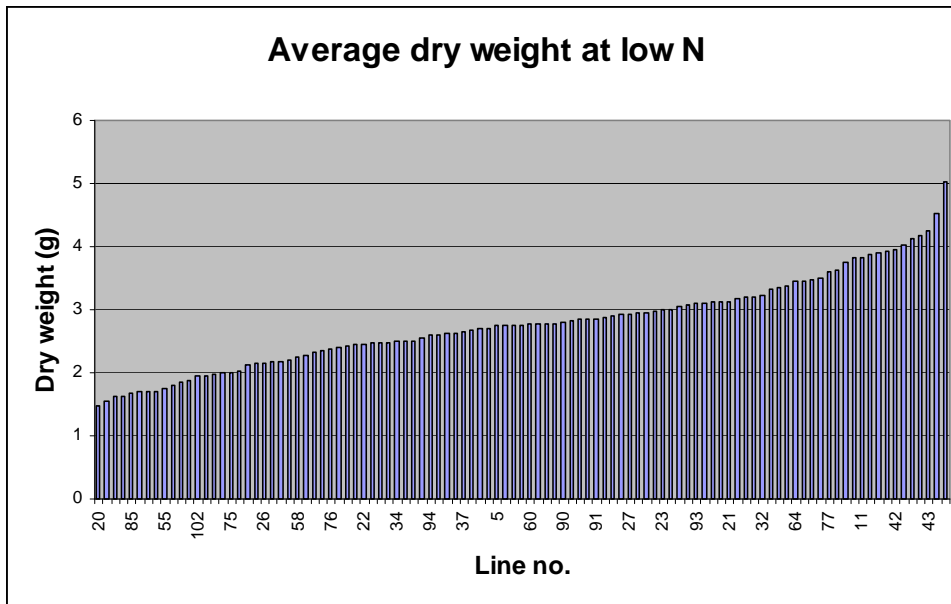


11 Nov

OREGIN project



BnaDFS



OREGIN: future

- Community field trial of BnaDFFS at high and low NUE