2016 Variety Phenotype Summary

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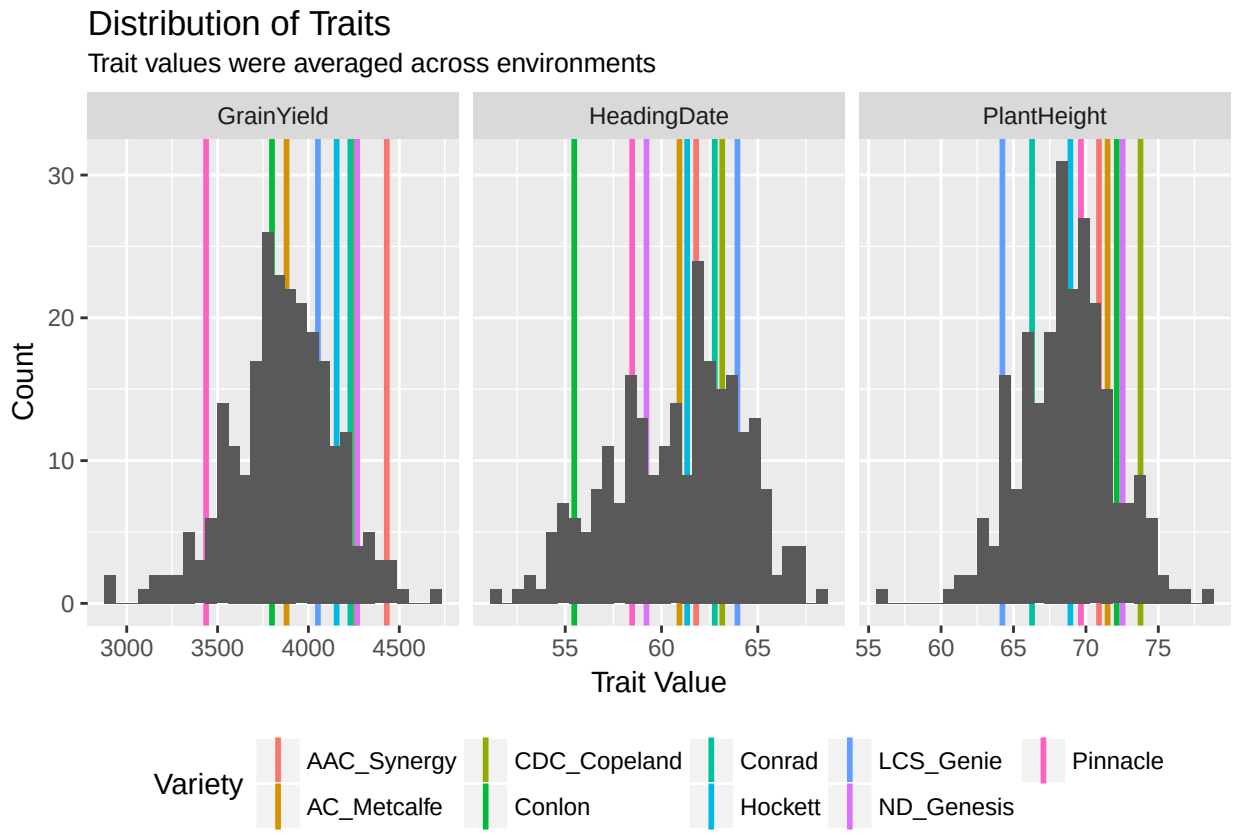
Introduction

The University of Minnesota spearheaded a multi-environment trial of spring two-row barley. As part of the experimental design, nine check varieties were planted in triplicate. Data on heading date, grain yield, and plant height were collected in most environments. Here is a summary of the phenotype data for these varities

Varieties and Source

Variety	Source
AAC_Synergy	Syngenta
AC_Metcalfe	AAFC
CDC_Copeland	University of Saskatchewan
Conlon	North Dakota State University
Conrad	Busch Ag
Hockett	Montana State University
LCS_Genie	Limagrain
ND_Genesis	North Dakota State University
Pinnacle	North Dakota State University

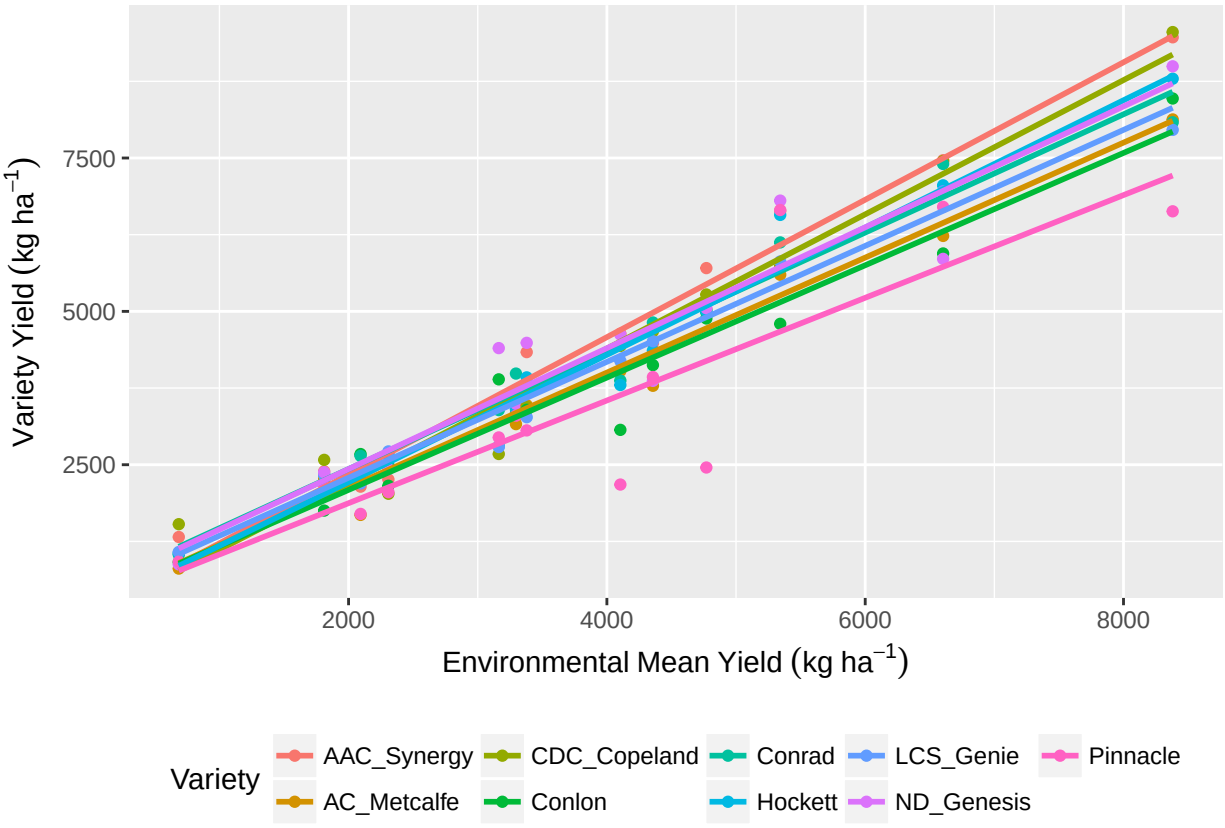
Trait Distributions

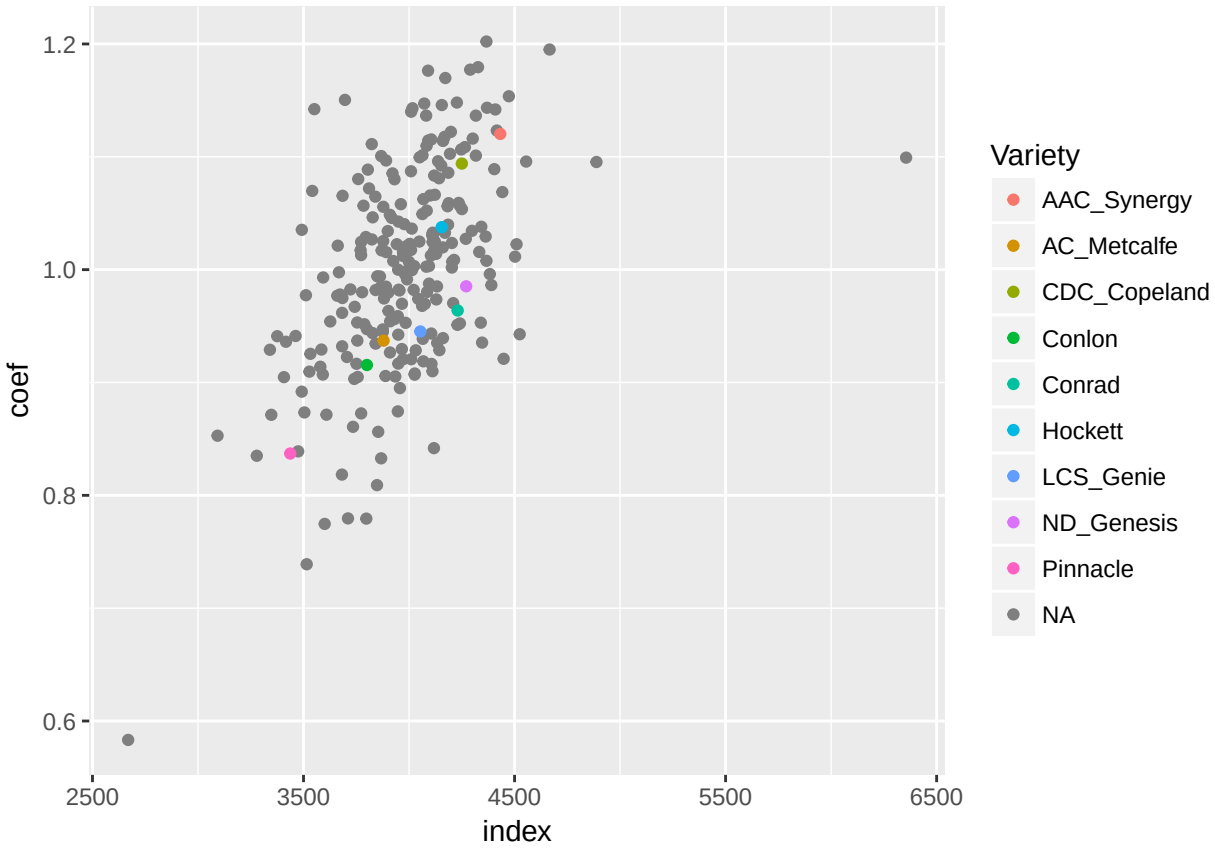


The above graph shows the distribution of all lines evaluated in the multi- environment trials. Each of the lines represents the trait value of the corresponding variety. The units are $kg\ ha^{-1}$ for `GrainYield`, *days* for `HeadingDate`, and *cm* for `PlantHeight`.

Variety	Yield ($kg\ ha^{-1}$)	Days to Heading (*days*)	Plant Height (*cm*)
AAC_Synergy	4430.906	61.79694	70.90658
AC_Metcalfe	3879.406	60.93294	71.49781
CDC_Copeland	4252.133	63.15391	73.77150
Conlon	3799.363	55.46903	72.13033
Conrad	4230.527	62.76764	66.28300
Hockett	4155.111	61.33208	68.92917
LCS_Genie	4052.210	63.94328	64.23697
ND_Genesis	4268.297	59.21792	72.53750
Pinnacle	3436.610	58.47497	69.65678

Stability


Variety Yield (kg ha^{-1})
7500
5000
2500
2000
4000
6000
8000
Environmental Mean Yield (kg ha^{-1})
Variety
AAC_Synergy
CDC_Copeland
Conrad
LCS_Genie
Pinnacle
AC_Metcalfe
Conlon
Hockett
ND_Genesis


1.2
1.0
0.8
0.6
coef
2500
3500
4500
5500
6500
index
Variety
AAC_Synergy
AC_Metcalfe
CDC_Copeland
Conlon
Conrad
Hockett
LCS_Genie
ND_Genesis
Pinnacle
NA