Staygreen Trait Equivalency

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Year of data collection: 2013
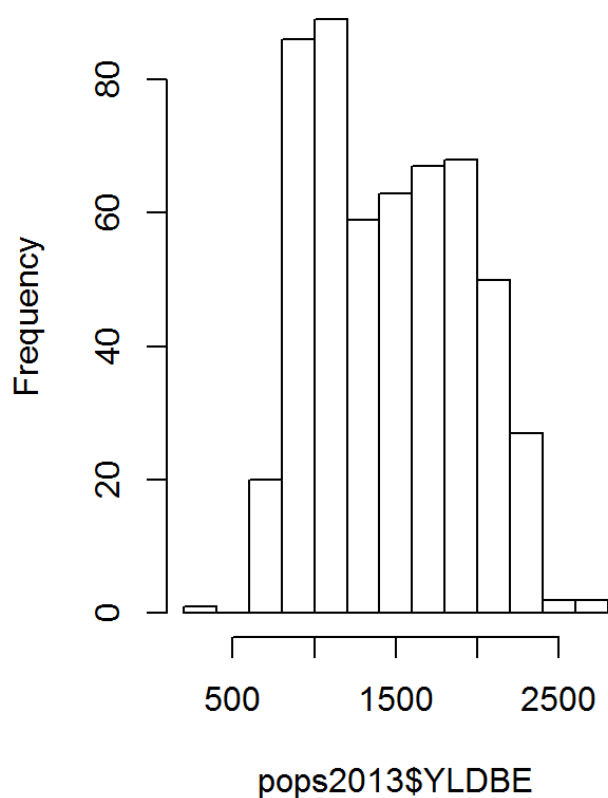
Moisture stress levels: Low
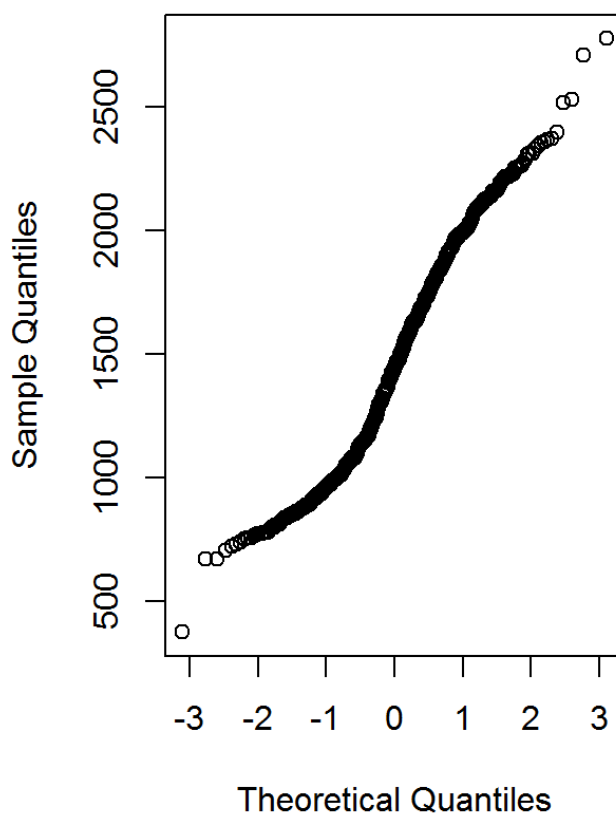
Locations: Three

- *Hart, TX*
- *Lubbock, TX*
- *Lamesa, TX*

Histograms & Q-Q plots for YLDBE

Histogram of pops2013$YLDBE

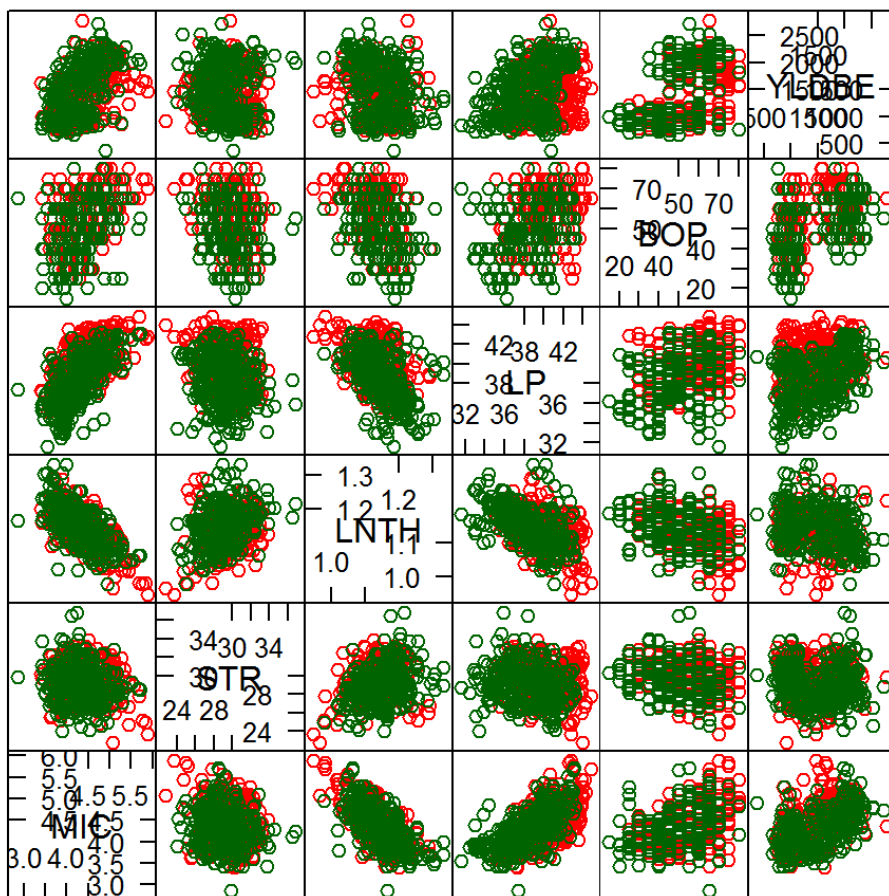**Normal Q-Q Plot**

Feature plot comparing all traits to each other

```
featurePlot(x=pops2013[c("MIC","STR","LNTH","LP","BOP","YLDBE")], y=pops2013$StaygreenGro
up, plot="pairs", auto.key=FALSE, col=c("red","dark green"))
```
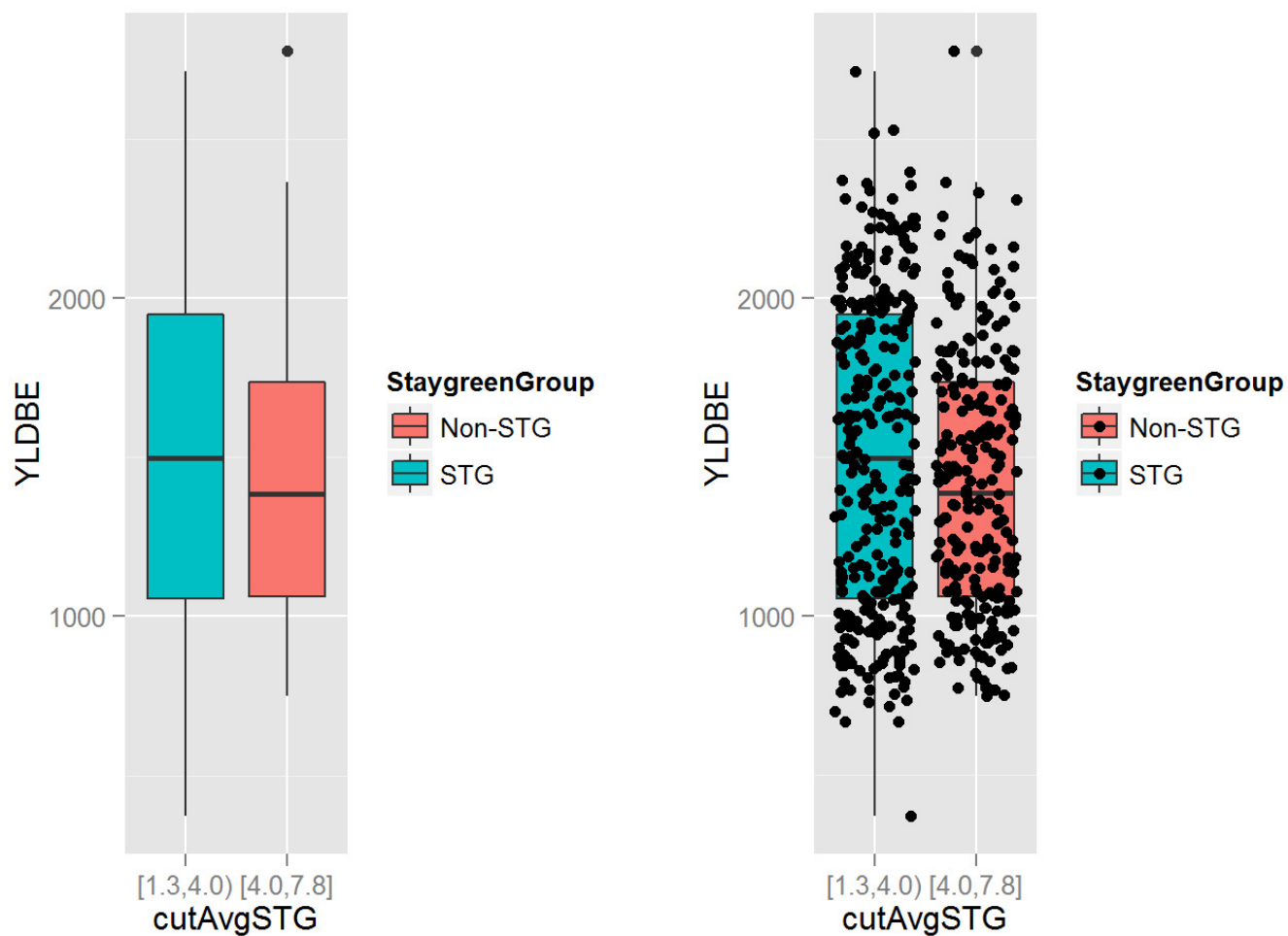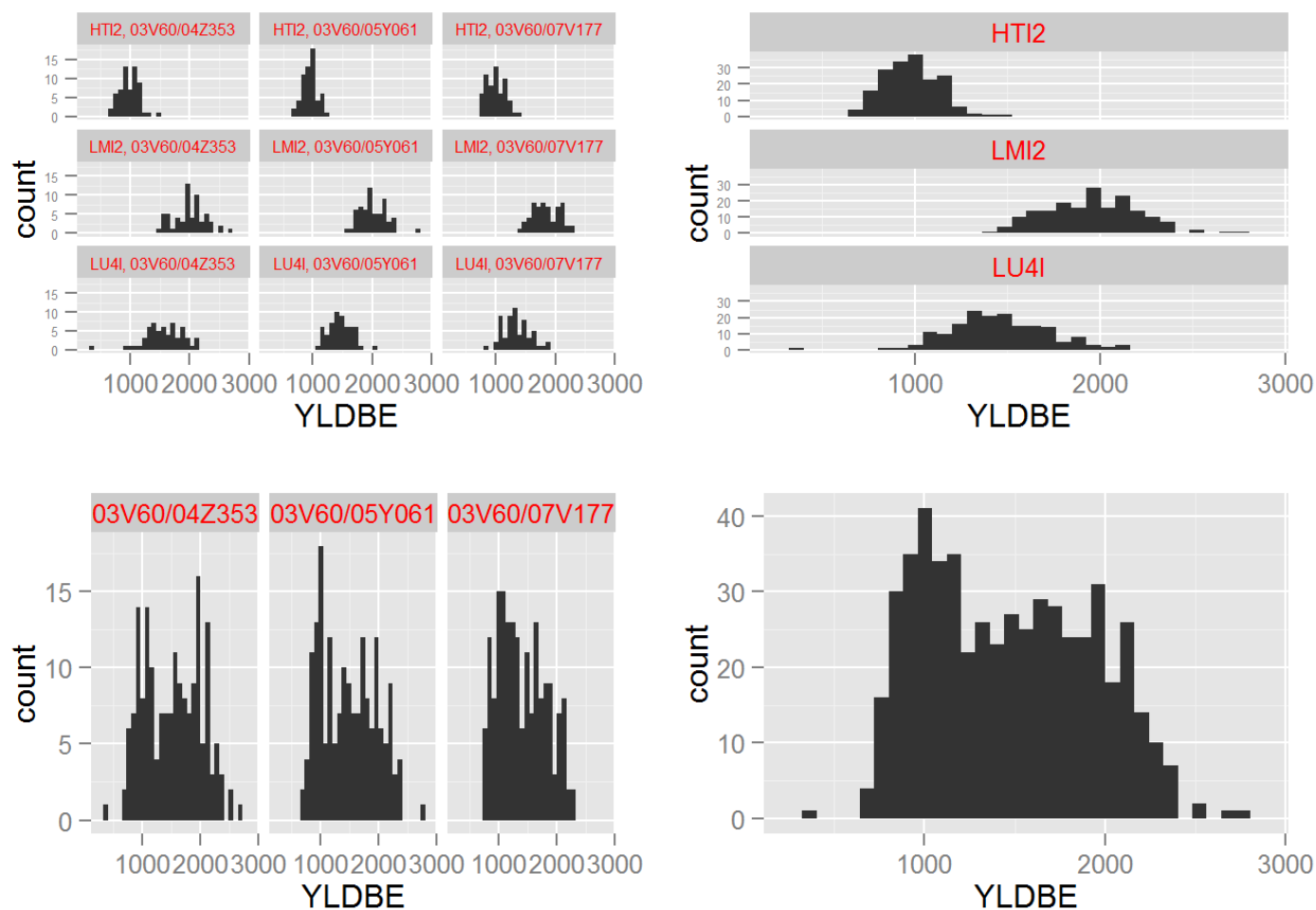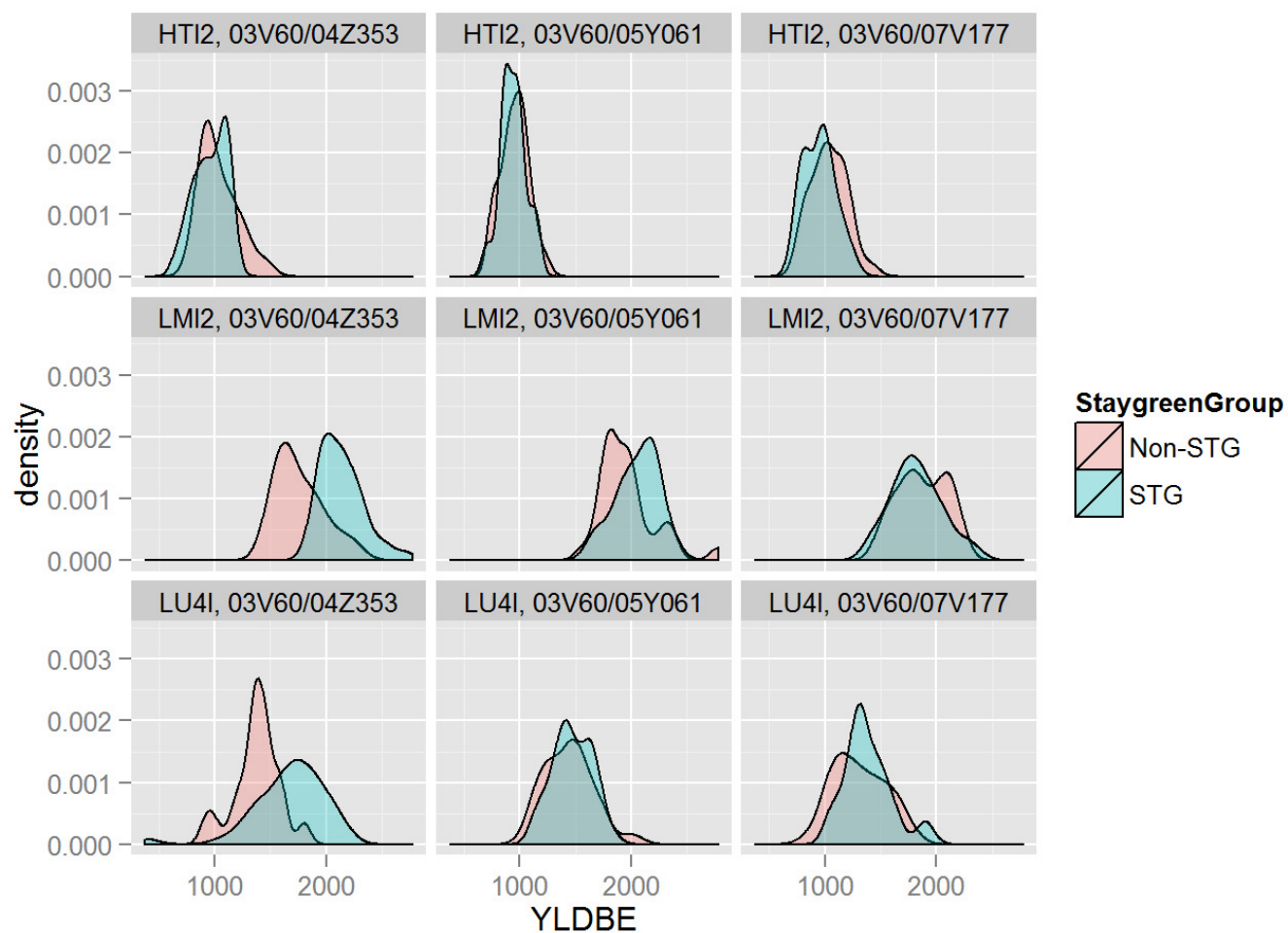

Scatter Plot Matrix

Cut Staygreen phenotype using the average Staygreen phenotype across all reps. Cut is made by dividing AvgSTG into two groups (STG<4 & Non-STG>6)

```
cutAvgSTG<- cut2(pops2013$AvgSTG,c(4))
table(cutAvgSTG)
```

```
## cutAvgSTG
## [1.3,4.0) [4.0,7.8]
##       297       243
```

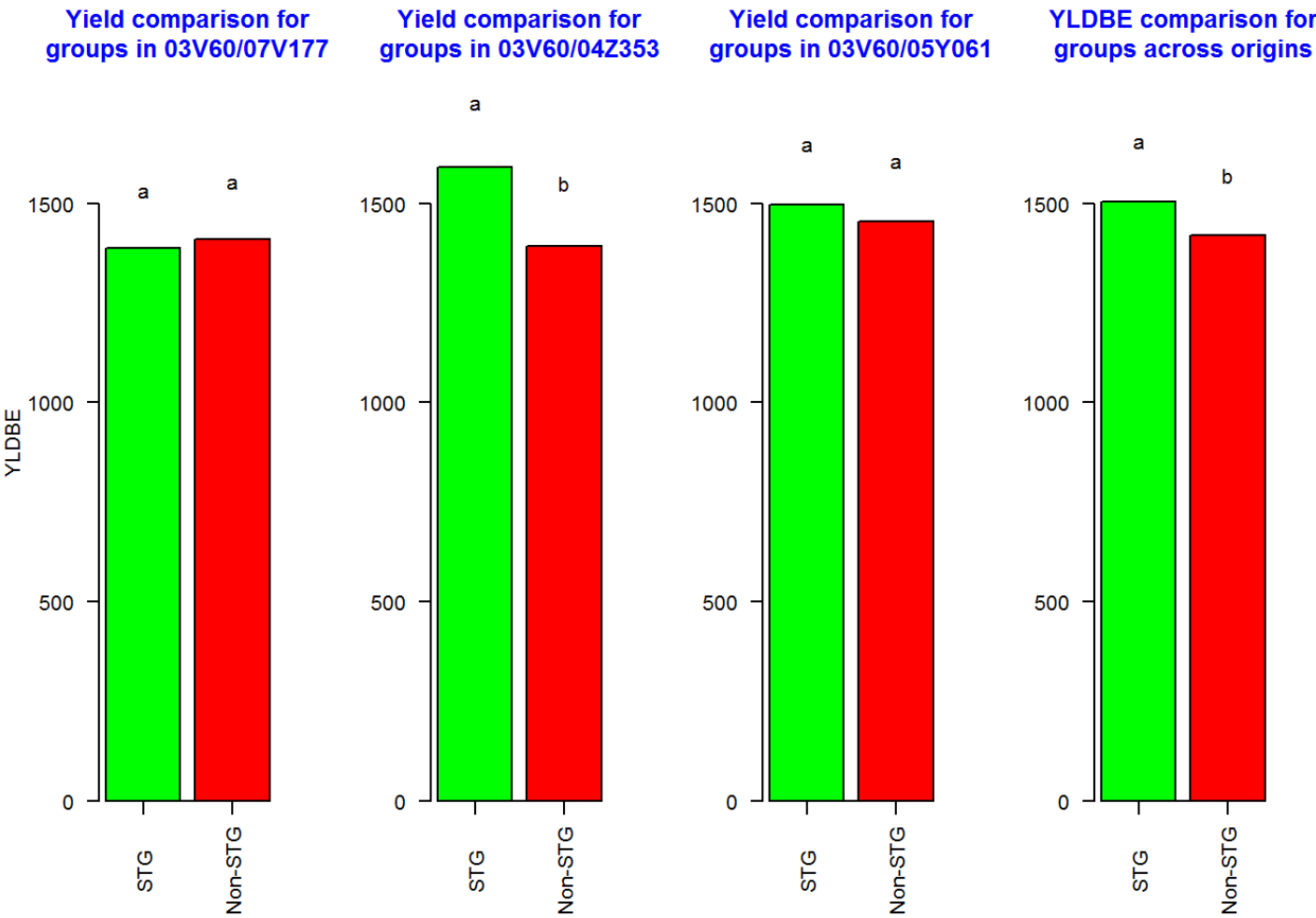*Staygreen groups compared for YLDBE using box plots*

Distribution using bar plots

Distribution using density plots

Create data subsets for each Origin*

Analysis of Variance for YLDBE

View ANOVA results using bar plots

Yield comparison for groups in 03V60/07V177 — Yield comparison for groups in 03V60/04Z353 — Yield comparison for groups in 03V60/05Y061 — YLDBE comparison for groups across origins

Analysis of Variance for other traits

View ANOVA results for other traits using bar plots