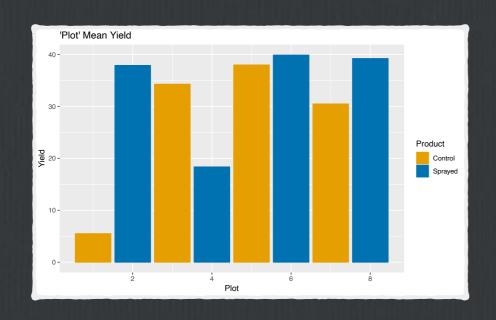
## Equal sized 'plots'



- ☐ The results of AOV suggest our assumptions of the statistical model are not supported
- $\square$  Specifically,  $e_{ij} \sim \mathcal{N}\left(0,\sigma^2\right)$

```
> wilcox.test(Yield ~ Product, paired=TRUE,...)
         Wilcoxon signed rank test
data: Yield by Product
V = 3, p-value = 0.625
> t.test(Yield ~ Product, paired=TRUE, ...)
         Paired t-test
data: Yield by Product
t = -0.67812, df = 3, p-value = 0.5463
mean in group Control mean in group Sprayed
             27.05887
                                   33.83388
> friedman.test(Yield ~ Block | Product, ...)
         Friedman rank sum test
data: Yield and Block and Product
Friedman chi-squared = 4.2, df = 3, p-value = 0.2407
> anova(Yield ~ Block + Product, ...)
         Analysis of Variance Table
Response: Yield
          Df Sum Sq Mean Sq F value Pr(>F)
          3 369.77 123.258 0.6174 0.6492
Block
Product
          1 91.80 91.802 0.4599 0.5463
```

Residuals 3 598.90 199.633

For our present purpose, however, it is only necessary to recognize that, whatever degree of care and experimental skill is expended in equalizing the conditions, other than the one under test, which are liable to affect the result, this equalization must always be to a greater or less extent incomplete, and in many important cases will certainly be grossly defective.

-R. A Fisher "The Design of Experiments, 9. Randomization; the Physical Basis of the Validity of the Test".