

Script_InsectSprays_-R.R

Usuario

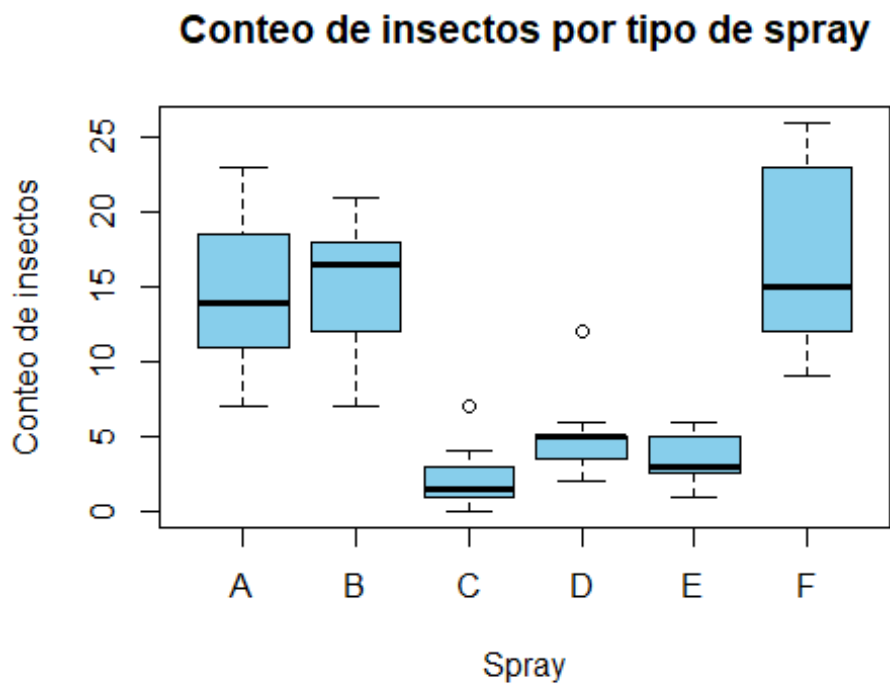
2025-05-30

```
# Tamara Martinez Martinez  
# 2067694  
# 30/05/2025
```

```
# Examen
```

```
data("InsectSprays")
```

```
boxplot(InsectSprays$count ~ InsectSprays$spray,  
        main = "Conteo de insectos por tipo de spray",  
        xlab = "Spray",  
        ylab= "Conteo de insectos",  
        col= "Skyblue")
```



```
tapply(InsectSprays$count, InsectSprays$spray, mean)
```

```
##           A           B           C           D           E           F  
## 14.500000 15.333333  2.083333  4.916667  3.500000 16.666667
```

```

tapply(InsectSprays$count, InsectSprays$spray, length)

##  A  B  C  D  E  F
## 12 12 12 12 12 12

bartlett.test(InsectSprays$count ~ InsectSprays$spray)

##
## Bartlett test of homogeneity of variances
##
## data: InsectSprays$count by InsectSprays$spray
## Bartlett's K-squared = 25.96, df = 5, p-value = 9.085e-05

shapiro.test(InsectSprays$count)

##
## Shapiro-Wilk normality test
##
## data: InsectSprays$count
## W = 0.9216, p-value = 0.0002525

InsectSprays$Coun.sqrt <- sqrt(InsectSprays$count)
shapiro.test(InsectSprays$Coun.sqrt)

##
## Shapiro-Wilk normality test
##
## data: InsectSprays$Coun.sqrt
## W = 0.96728, p-value = 0.05765

InsectSprays.aov <- aov(InsectSprays$Coun.sqrt ~ InsectSprays$spray)
summary(InsectSprays.aov)

##
##              Df Sum Sq Mean Sq F value Pr(>F)
## InsectSprays$spray  5  88.44  17.688    44.8 <2e-16 ***
## Residuals        66  26.06   0.395
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```