

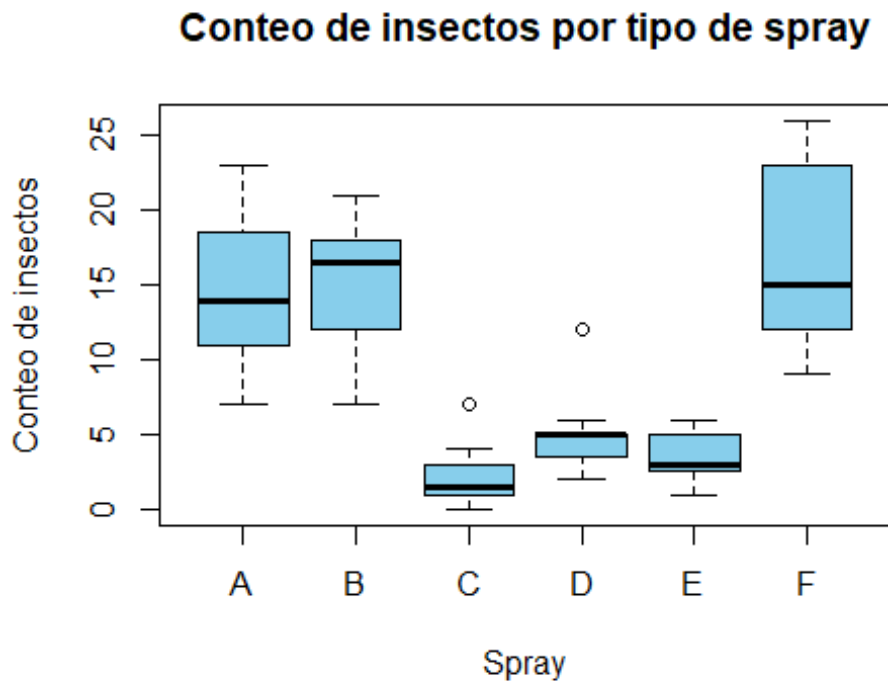
Script_ExamenFinal.R

Sofia

2025-05-30

```
# Sofia del Carmen Platas Martinez  
#2070830  
#Examen Final  
#30/05/2025
```

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



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

```
##           A           B           C           D           E           F
## 22.272727 18.242424  3.901515  6.265152  3.000000 38.606061
```

```
shapiro.test(InsectSprays$count)
```

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

```
# el p value = 0.0002525, por lo tanto los datos no tienen una
distribución normal
```

```
bartlett.test(count ~ spray, data = InsectSprays)
```

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

```
# el p value = 9.085e-05, por lo tanto no hay homogeneidad de varianzas
```