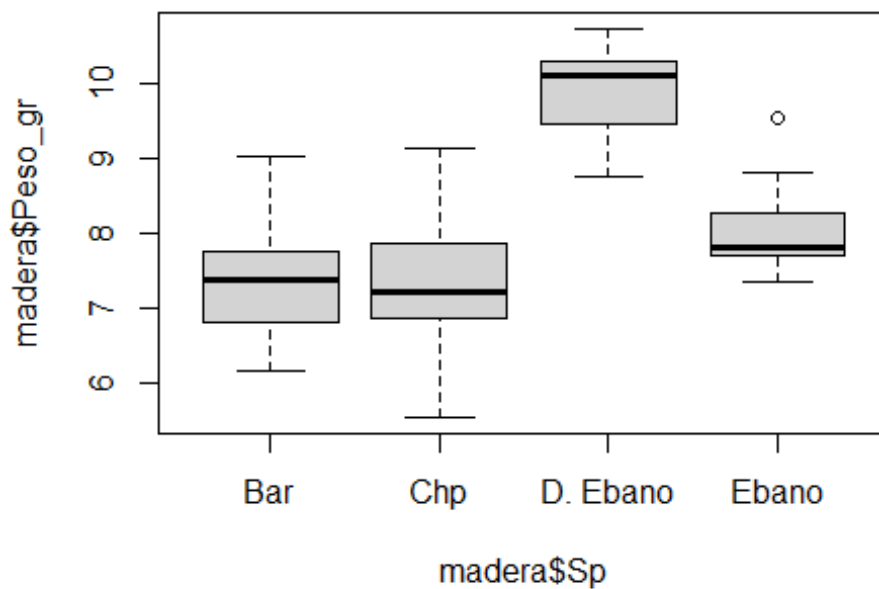


Clase_S08_D2.R

isa_r

2022-05-20

```
# Amanda  
# Semana 8  
# 10/03/2022  
# Revisar datos peso madera 2x2x2  
# BD madera  
  
madera <- read.csv("BD.est.madera2x2.csv", header = T)  
  
madera$Sp <- as.factor(madera$Sp)  
  
boxplot(madera$Peso_gr ~ madera$Sp)
```



```
library(dplyr)  
  
##  
## Attaching package: 'dplyr'
```

```

## The following objects are masked from 'package:stats':
##
##   filter, lag

## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union

# alfa=0.05
# Ho= La variable peso de La Sp barreta es igual al peso de La muestra
teórica
# H1= La variable peso de La Sp barreta es diferente

# Comparación de una media teórica Mu=8.0 para Sp=Barreta

bar <- madera %>%
  filter(Sp=="Bar")

mean(bar$Peso_gr)

## [1] 7.30712

t.test(bar$Peso_gr, mu=8.0)

##
## One Sample t-test
##
## data: bar$Peso_gr
## t = -13.906, df = 124, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 8
## 95 percent confidence interval:
##  7.20850 7.40574
## sample estimates:
## mean of x
##  7.30712

t.test(bar$Peso_gr, mu=7.5)

##
## One Sample t-test
##
## data: bar$Peso_gr
## t = -3.871, df = 124, p-value = 0.0001743
## alternative hypothesis: true mean is not equal to 7.5
## 95 percent confidence interval:
##  7.20850 7.40574
## sample estimates:
## mean of x
##  7.30712

```

```

t.test(bar$Peso_gr, mu=7.45)

##
## One Sample t-test
##
## data: bar$Peso_gr
## t = -2.8676, df = 124, p-value = 0.004863
## alternative hypothesis: true mean is not equal to 7.45
## 95 percent confidence interval:
## 7.20850 7.40574
## sample estimates:
## mean of x
## 7.30712

t.test(bar$Peso_gr, mu=7.38)

##
## One Sample t-test
##
## data: bar$Peso_gr
## t = -1.4627, df = 124, p-value = 0.1461
## alternative hypothesis: true mean is not equal to 7.38
## 95 percent confidence interval:
## 7.20850 7.40574
## sample estimates:
## mean of x
## 7.30712

t.test(bar$Peso_gr, mu=7.4)

##
## One Sample t-test
##
## data: bar$Peso_gr
## t = -1.8641, df = 124, p-value = 0.06468
## alternative hypothesis: true mean is not equal to 7.4
## 95 percent confidence interval:
## 7.20850 7.40574
## sample estimates:
## mean of x
## 7.30712

# Comparación de una media teórica Mu=8.5 para Sp=Chp

chp <- madera %>%
  filter(Sp=="Chp")

mean(chp$Peso_gr)

## [1] 7.36344

t.test(chp$Peso_gr, mu=8.5)

```

```

##
## One Sample t-test
##
## data:  chp$Peso_gr
## t = -17.547, df = 124, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 8.5
## 95 percent confidence interval:
##  7.235239 7.491641
## sample estimates:
## mean of x
##    7.36344

t.test(chp$Peso_gr, mu=7.4)

##
## One Sample t-test
##
## data:  chp$Peso_gr
## t = -0.56444, df = 124, p-value = 0.5735
## alternative hypothesis: true mean is not equal to 7.4
## 95 percent confidence interval:
##  7.235239 7.491641
## sample estimates:
## mean of x
##    7.36344

t.test(chp$Peso_gr, mu=7.48)

##
## One Sample t-test
##
## data:  chp$Peso_gr
## t = -1.7995, df = 124, p-value = 0.07436
## alternative hypothesis: true mean is not equal to 7.48
## 95 percent confidence interval:
##  7.235239 7.491641
## sample estimates:
## mean of x
##    7.36344

# Comparación de una media teórica Mu=12.00 para Sp=D.Eb

d.eb <- madera %>%
  filter(Sp=="D. Ebano")
mean(d.eb$Peso_gr)

## [1] 9.94

t.test(d.eb$Peso_gr, mu=12)

##
## One Sample t-test

```

```
##
## data: d.eb$Peso_gr
## t = -21.205, df = 29, p-value < 2.2e-16
## alternative hypothesis: true mean is not equal to 12
## 95 percent confidence interval:
## 9.741308 10.138692
## sample estimates:
## mean of x
## 9.94

# Comparación de una media teórica Mu=11.3 para Sp=D.Eb
t.test(d.eb$Peso_gr, mu=11.3)

##
## One Sample t-test
##
## data: d.eb$Peso_gr
## t = -13.999, df = 29, p-value = 1.967e-14
## alternative hypothesis: true mean is not equal to 11.3
## 95 percent confidence interval:
## 9.741308 10.138692
## sample estimates:
## mean of x
## 9.94

# Comparación de una media teórica Mu=8.3 para Sp=Eb

Eb <- madera %>%
  filter(Sp=="Ebano")

mean(Eb$Peso_gr)

## [1] 7.971667

t.test(Eb$Peso_gr, mu=8.3)

##
## One Sample t-test
##
## data: Eb$Peso_gr
## t = -3.9549, df = 29, p-value = 0.0004521
## alternative hypothesis: true mean is not equal to 8.3
## 95 percent confidence interval:
## 7.801873 8.141460
## sample estimates:
## mean of x
## 7.971667

# Comparación de una media teórica Mu=7.9 para Sp=Eb
t.test(Eb$Peso_gr, mu=7.9)
```

```
##  
## One Sample t-test  
##  
## data: Eb$Peso_gr  
## t = 0.86325, df = 29, p-value = 0.3951  
## alternative hypothesis: true mean is not equal to 7.9  
## 95 percent confidence interval:  
## 7.801873 8.141460  
## sample estimates:  
## mean of x  
## 7.971667
```