#t.test for lifespan of scratch vs. treated trees

t.test(scratchTreatedTrees$`Lifespan after infection`,punchTreatedTrees$`Lifespan after infection`)

Welch Two Sample t-test

data: scratchTreatedTrees$`Lifespan after infection` and punchTreatedTrees$`Lifespan after infection`

t = -2.2764, df = 159.13, p-value = 0.02415

alternative hypothesis: true difference in means is not equal to 0

95 percent confidence interval:

-2.883464 -0.204448

sample estimates:

mean of x mean of y

6.648352 8.192308

#Proportion test for the survival of scratch vs. punch treated trees

scratch = c(22,91)

punch = c(27,79)

tab = table(scratch,punch)

colnames(tab) = c("Lived","Died")

tab

Lived Died

scratch 22 91

punch 27 79

prop.test(tab)

2-sample test for equality of proportions with continuity

correction

data: tab

X-squared = 0.81538, df = 1, p-value = 0.3665

alternative hypothesis: two.sided

95 percent confidence interval:

-0.17966586 0.05961242

sample estimates:

prop 1 prop 2

0.1946903 0.2547170