Untitled

Ethan Rutledge

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1. In a short paragraph, describe a baseline scenario regarding seed predation. At the end, state the null hypothesis for seed predation.

We are running an experiment to determine if Blue Jays have a preference between small seeds and big seeds.We placed a known, equal amount of each size at a bird feeder and waited an hour. We then went back and counted the amount of seeds left over from each size. The null hypothesis is that there is no difference between the amount of small seeds versus big seeds taken by Blue Jays.

2. Paste the R code you used to complete the table and calculate the rates.

```
rm(list = ls())
  pol_n_predation = 26
  pol_n_no_predation = 184
  pol_n_total = 210
  pol_predation_rate = 26/210
  psd_n_predation = 25
  psd_n_no_predation = 706
  psd_n_total = 731
  psd_predation_rate = 25/731

print(
paste0(
"The seed predation rate for Polyscias fulva is: ",
round(pol_predation_rate, digits = 3)))
```

```
## [1] "The seed predation rate for Polyscias fulva is: 0.124"
```

```
print(
paste0(
"The seed predation rate for Pseudospondias microcarpa is: ",
round(psd_predation_rate, digits = 3)))
```

```
## [1] "The seed predation rate for Pseudospondias microcarpa is: 0.034"
```

3. Create a table (Worked with JT)

```
seedtab = matrix(c("Polyscias fulva (pol)", "Pseudospondias microcarpa (psd)", 26, 25, 184, 706, 210, 73
colnames(seedtab) = c("", "")
rownames(seedtab) = c("Species", "Any taken", "None taken", "N", "Predation rate")
seedtab = as.table(seedtab)
seedtab
```

```
##
## Species        Polyscias fulva (pol) Pseudospondias microcarpa (psd)
## Any taken      26                    25
## None taken     184                   706
## N              210                   731
## Predation rate 0.124                 0.034
```

4. Use the seed predation proportions you calculated to determine the ratios of seed proportions.

Ratios of seed proportions 0.124/0.034= 3.647 pol to 1 psd