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ECo 602
Week 6 Reading Questions

1. In a short paragraph, describe a baseline scenario regarding seed predation. At the end, state the null hypothesis for seed predation.
    a. In this case, the baseline scenario regarding seed predation is a dataset showing the rate at which seeds from two species (polyscias fulva and pseudospondias microcarpa) were taken (presumed to be a result of seed predation), t, and the total number of seeds observed, N. The null hypothesis is that there is no difference in the predation rates of the two species.
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 = (pol_n_predation / pol_n_total)

psd_n_predation = 25
psd_n_no_predation = 706
psd_n_total = 731
psd_predation_rate = (psd_n_predation / psd_n_total)

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

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

3. Create a table and fill in the missing values:

species	Polyscias fulva (pol)	Pseudospondias microcarpa (psd)
Any taken	26	25
None taken	184	706
N	210	731
Predation rate	.124	.034

4. Use the seed predation proportions you calculated to determine the ratio of seed predation proportions.
    a. In this case, the predation proportion would be pol_predation_rate / psd_predation_rate, or .124/.034 = 3.62. In this case, I used psd as the denominator as it is the second column in the table/in the book it is labeled at t2 and N2.