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Week 6 Reading Questions

I did not work on these questions with anyone else

* **Q1 (3 pts.):** In a short paragraph, describe a baseline scenario regarding seed predation. At the end, state the null hypothesis for seed predation.

The baseline scenario described in the Bolker reading was the setting out of seeds of two species of seed in many spots and the measurement of when seeds were taken or not taken, potentially by seed predators. The goal was to ascertain if there was preferential taking of one species of seed over the other. The null hypothesis would be that there was no correlation between seed species and rate of predation.

* **Q2 (3 pts.):** Paste the R code you used to complete the table and calculate the rates.

pol\_n\_predation = 26

pol\_n\_no\_predation = 184

pol\_n\_total = pol\_n\_predation+pol\_n\_no\_predation

pol\_n\_predation\_rate = pol\_n\_predation/pol\_n\_total

psd\_n\_predation = 25

psd\_n\_no\_predation = 706

psd\_n\_total = psd\_n\_predation+psd\_n\_no\_predation

psd\_predation\_rate = psd\_n\_predation/psd\_n\_total

print(

paste0(

"The seed predation rate for Polyscias fulva is:",

round(pol\_n\_predation\_rate, digits = 3)))

print(

paste0(

"The seed predation rate for Pseudospondias microcarpa is:",

round(psd\_predation\_rate, digits = 3)))

* **Q3 (3 pts.):** Show your table with the missing values filled in.

| **species** | **Any taken** | **None taken** | **N** | **Predation rate** |
| --- | --- | --- | --- | --- |
| Polyscias fulva (pol) | 26 | 184 | 210 | 0.124 |
| Pseudospondias microcarpa (psd) | 25 | 706 | 731 | 0.034 |

* **Q4 (2 pts.):** Report the seed ratio of seed predation proportions and show the R code you used to do the calculation.

predation\_ratio = psd\_predation\_rate/pol\_n\_predation\_rate

print(predation\_ratio, digits = 3)

Ratio: 0.276