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Week 6 Reading Question

**All questions for this assignment were answered alone.*

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

In Kibale National Park, Uganda, there are two fruiting trees, *Polyscias fulva* and *Pseudospondias microcarpa*. Researchers thought that there may be differences in seed predation rates between the two trees, based on several different factors such as location in the tree canopy, type of granivores present, etc. They created an alternative hypothesis that there would be differences in seed predation between the two species of trees. The null hypothesis for seed predation states that there will be no difference in seed predation between the two species of trees.

Q2 (3 pts.): 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 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.

The ratio of seed predation proportion is 3.62.

```
ratio <- pol_predation_rate/psd_predation_rate
print(
  paste0(
    "The ratio of seed predation proportions is: ",
    round(ratio, digits = 3)))
```