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ECO 602

Week 6 Questions

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

The seed data table provides the values for seed removal between two seed species labeled pol and psd. The values on the chart are as follows: *i* represents species, ti represents the number of times that species seeds disappear, and Ni represents the total number of observations of species. They are looking at the observed proportions of the time that seeds disappeared for each species, the overall proportion, and the ratio of predation probabilities. The question that they are looking to answer is “Is there differential predation on the seeds on these two species?”. The Null hypothesis is that there is no differential predation with these two species of seeds.

**Q2: 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 = 210

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

pol\_predation\_rate

psd\_n\_predation = 25

psd\_n\_no\_predation = 706

psd\_n\_total = 731

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

psd\_predation\_rate

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

**Q4: Use the seed predation proportions you calculated to determine the ratio of seed predation proportions.**

I think the ratio of seed predation proportions is 0.034/0.124= .274