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- The seed predation experiment looks at sample data of total seeds found with the number of known seed disappearances. They can compare the seed disappearances for two species to see if one is more likely to be predated than the other. Even if the total number of seeds is different for the populations, we can compare with a baseline ratio of seeds taken for multiple species. The null hypothesis in this scenario is that there is no predation of these species compared to one another's predation rates.
- 2.

```
rm(list = ls())
pol_n_predation = 26
pol_n_no_predation = 184
pol_n_{total} = 210
pol_predation_rate = 0.124
psd_n_predation = 25
psd n no predation = 706
psd_n_total = 731
psd_predation_rate = 0.034
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)))
```

3. Could not get the table to display properly. The columns and rows were not correct with the species over some data values and then the number of columns being wrong.

```
data = matrix(
    c(pol_n_predation, pol_n_no_predation, pol_n_total, pol_predation_rate, psd_n_predation,
    psd_n_no_predation, psd_n_total, psd_predation_rate),
    ncol = 5, nrow = 2, byrow = TRUE
    )
    colnames(data) = c("species", "Any taken", "None taken", "N", "Predation Rate")
    rownames(data) = c("Polyscias fulva (pol)", "Pseudospondias microcarpa (psd)")
    final = as.table(data)
```

4. The seed ration of seed predation proportions is equal to 0.05419766.

```
seed\_predation\_proportions = (pol\_n\_predation + psd\_n\_predation) / (pol\_n\_total + psd\_n\_total) \\ seed\_predation\_proportions
```