

Reading questions 6

Olivia Dinkelacker

Q1: The data quantifies how many times seeds of two different species (pol and psd) disappeared/were eaten by predators. Seeds were offered at observation stations where they were taken. In total there were $N = 210$ pol and $N = 731$ psd. The question they ask is: Is there differential predation on the seeds on these two species?

The null hypothesis would be: There is no difference in the predation rate on the seeds between the two species.

Q2:

```
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 = 732
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:

species	Ant taken	None taken	N	Predation rate
<i>Polyscias fulva (pol)</i>	26	184	210	124
<i>Pseudospondias micocarpa (psd)</i>	25	706	731	34

Q4:

The predation proportion rate is 3.625143.

```
#calculate ratio of seed predation proportions
pol_predation_rate/psd_predation_rate
```