

Rosalyn Bathrick
Reading Questions 6
I did not work with other students

Q1. There are two species of plants, each producing a seed – one large, one big – in Kibale National Park. There are observation stations in the park where these seeds exist, and are counted by observers. The seeds are disappearing as (probably) seed predators take them. The baseline scenario is that both species are sought after by predators, and although they are different masses and exist in different quantities, there is no difference between the rate of disappearance for each species. The null hypothesis is that there is no difference in predation rate between the species.

Q2.

$\text{pol_n_predation} = 26$

$\text{pol_n_no_predation} = 184$

$\text{pol_n_total} = \text{pol_n_predation} + \text{pol_n_no_predation}$

$\text{pol_predation_rate} = \text{pol_n_predation} / \text{pol_n_total}$

$\text{psd_n_predation} = 25$

$\text{psd_n_no_predation} = 706$

$\text{psd_n_total} = \text{psd_n_predation} + \text{psd_n_no_predation}$

$\text{psd_predation_rate} = \text{psd_n_predation} / \text{psd_n_total}$

Q3.

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 $\text{ratio_pred} = \text{pol_predation_rate} / \text{psd_predation_rate}$