

1. Is there a basis for "choice" by opposing needs?
2. Is there evidence of choice?
3. Can the evolutionary (fitness) advantage of the choice be quantified?
4. Is observed choice optimal?
5. Propose plausible decision rule?

Null hypothesis:
random deposition

Poisson distribution

$$p(n) = \frac{\lambda^n e^{-\lambda}}{n!}$$

Decision Rule

larger bean

same } accept
or fewer }
eggs }

smaller bean

Fewer eggs; } accept