

REPORT

Objectives: To identify the most important explanatory variables of *Darlingtonia californica* carnivores flowers. Dataset measurements were made on 87 plants from four sites in southern Oregon. Ten variables were measured on each plant, 7 based on morphology and 3 based on biomass.

Assumptions of PCA:

- **Data must be Numeric and Continuous: VERIFIED**
- **Variables should be linearly related: VERIFIED**
- **Variables should be on a similar scale: Transformed**

Results:

- **Eigenanalysis: CONDUCTED**
 - [1] 0.444 0.177 0.153 0.073 0.047 0.036 0.025 0.024 0.014 0.005
- **Proportion of Eigenvalues:**
 - [1] 0.444 0.177 0.153 0.073 0.047 0.036 0.025 0.024 0.014 0.005

Interpretation:

- PC1 gives roughly equal weight to all variables except tube.diam and keel.diam, and can be interpreted as a measure of pitcher size. This PC accounts for 44% of the variance in the response variables.
- PC2 gives opposing weights to pitcher height and diameter than to the dimensions of the fishtail appendage (wing1.length, wing2.length, wingsprea), and thus can be interpreted as a measure of pitcher shape. This PC accounts for 18% of the variance in the response variables.
- PC3 gives most weight to tube and keel diameters, and might be interpreted as a measure of leaf width. This PC accounts for 15% of the variance in the response variables.

For More Visit: [Github](#)