# Floral visitors in urban gardens and natural areas: diversity and interaction networks in a neotropical urban landscape

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### The study

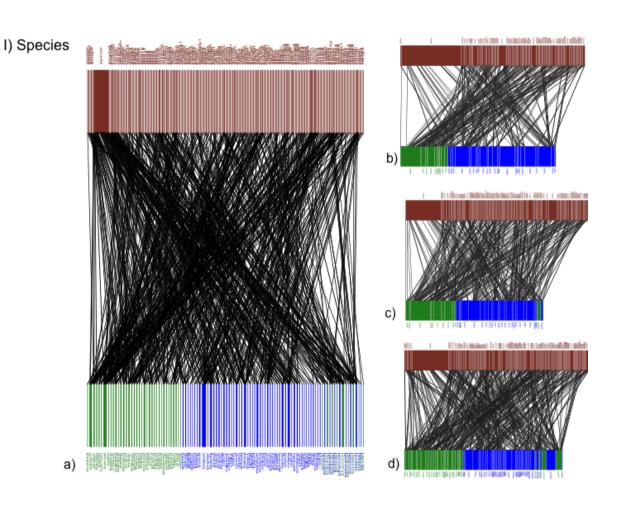
- Find sites
  - 9 urban gardens and
    9 natural areas
  - Get permissions
- Sample floral visitors
  - 2 hours per site
  - Capture and classify
- Repeat each season
  - Frost, dry, rainy
- 1301 observations



### The study

### Key properties:

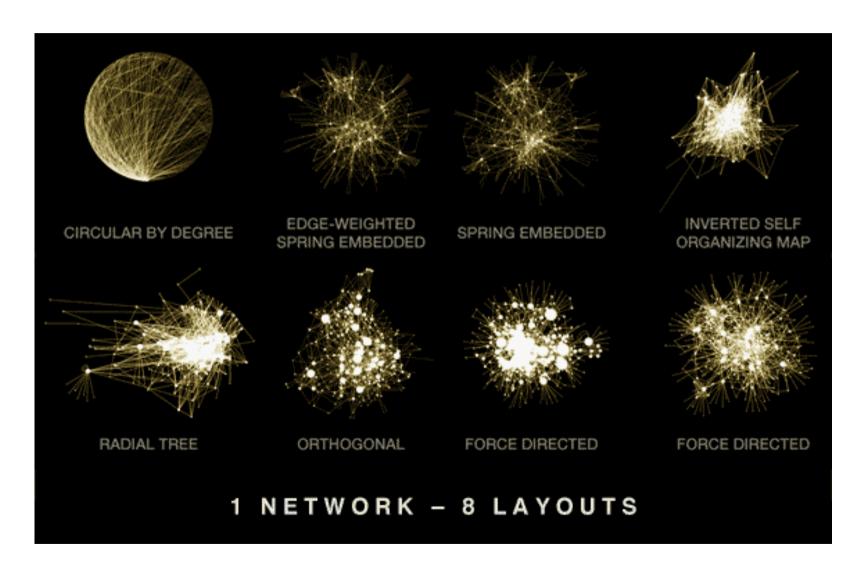
- Richness, abundance, and density
- Specialisation, generality, and vulnerability
- Seasonality



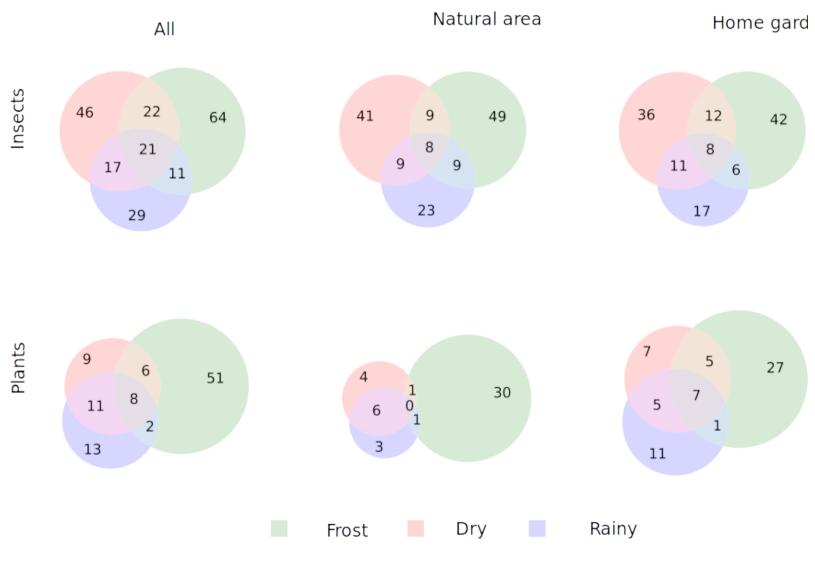
# The naive approach



# A common visualization problem

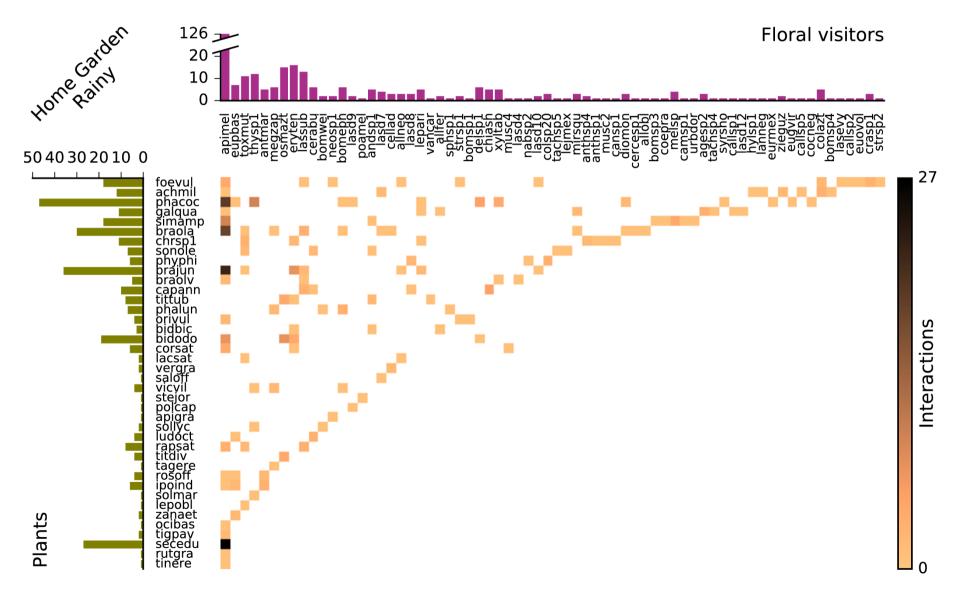


# **Properties**

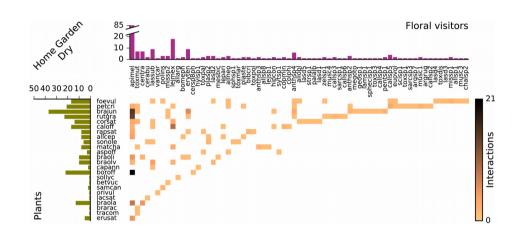


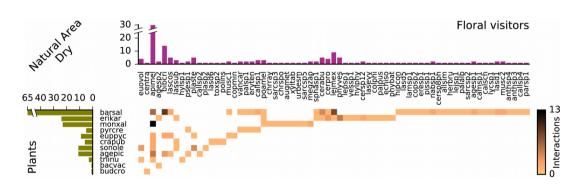
Matplotlib Venn3

### The network



### Compare and contrast





- Richness
- Abundance
- Generality
- Vulnerability
- Communities\*
- Not nested\*

### Visualization

- Exploratory and explanatory visualization
- Decide what properties you are interested in
- Plot properties, not networks
- Visualizations that can be compared

### Extra: Seasonality

