Figures and Tables

- Is it important to communicate exact numbers? - use a table
- Do you want to show relationships between treatments, etc.? - use figures

Figures

- Use to show relationships
- Generally easier for the reader than tables
- Figures should stand alone without caption or title
- Specify ALL units

Figures (continued)

- Change size/scale of axes to show your point (but do not distort data)
- Lettering large enough to read when reduced for printing (fit to 1 or 2 column width in journal)
  - Reduce photocopy to see about size and readability

Figures (continued)

- Use bar graph when x is a discrete variable (e.g., treatments)
- Use line graph when x is a continuous variable (e.g., time or temperature)
Keep figures simple (not a lot of data)
Whenever possible, provide both centrality and dispersion
Don’t use color to separate bars or lines
Don’t put too many lines in a single graph
  – Stack or group similar graphs to facilitate comparisons (e.g., same measurements in different months)

“Boxed in”
Grid lines
Axes fully labeled, including units and ± SE
Dependent variable on Y axis
Use Excel “xy scatter” chart type, not “line”
Proportions don’t distort the data (Fig. 2)
Figure 3

Yield (kg/ha) ± S.E.

Treatment 1  Treatment 2  Treatment 3  Treatment 4

Figure 4

Yield

Treatment 1  Treatment 2  Treatment 3  Treatment 4

Figure 5

Yield
Table 1. Growth of insect X on two different diets at 15 - 30°C

<table>
<thead>
<tr>
<th>Temp. (°C)</th>
<th>n</th>
<th>Growth (mg/d) ± S. E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>12</td>
<td>0.5 ± 0.1</td>
</tr>
<tr>
<td>20</td>
<td>12</td>
<td>0.7 ± 0.1</td>
</tr>
<tr>
<td>25</td>
<td>12</td>
<td>1.5 ± 0.2</td>
</tr>
<tr>
<td>30</td>
<td>18</td>
<td>11.0 ± 0.2</td>
</tr>
</tbody>
</table>
Tables

Table 1. Growth of insect X on two different diets at 15 - 30°C

<table>
<thead>
<tr>
<th>Temp. (°C)</th>
<th>n</th>
<th>Diet 1</th>
<th>Diet 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>12</td>
<td>0.5 ± 0.1</td>
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</tr>
</tbody>
</table>

Numbers

- Significant digits right of decimal
  - One digit > than you measured
    - e.g., 0.1 for individual insects
  - Do not add extra digits
    - even if the computer does it for you, it’s still not valid

- Give all units in figures and tables (mg/d ± 95% C.L.)

Slides

- Use figures (to show patterns) rather than tables
- Use simplified tables (3 to 5 lines)
- Use large lettering, no complicated backgrounds
- Use patterns in bar graphs, avoid red/green color differences (>10% of men are color blind)
- No 3-D
- Follow other guidelines for figures

Assignments

- Read Day and Gastel (16-18)
- Due Mar 19 (Thursday)
  - Revised Intro, Methods
  - New Figures and Tables
  - If you haven’t already,
    » Add references section
    » Combine into one document