Creating a Science Illustration.

Elements—Figure or Image

1. Provide a clear image of the representative data or sample from which data was obtained.
2. Indicate magnification if taken in a microscope.
3. Indicate key features in some visible fashion (arrows, lettering or numbering, asterisks, circles, etc. Be consistent with your conventions!).
4. Include panel labels if a multi-panel image is used (letters or numbers. Be consistent with your labeling style!).

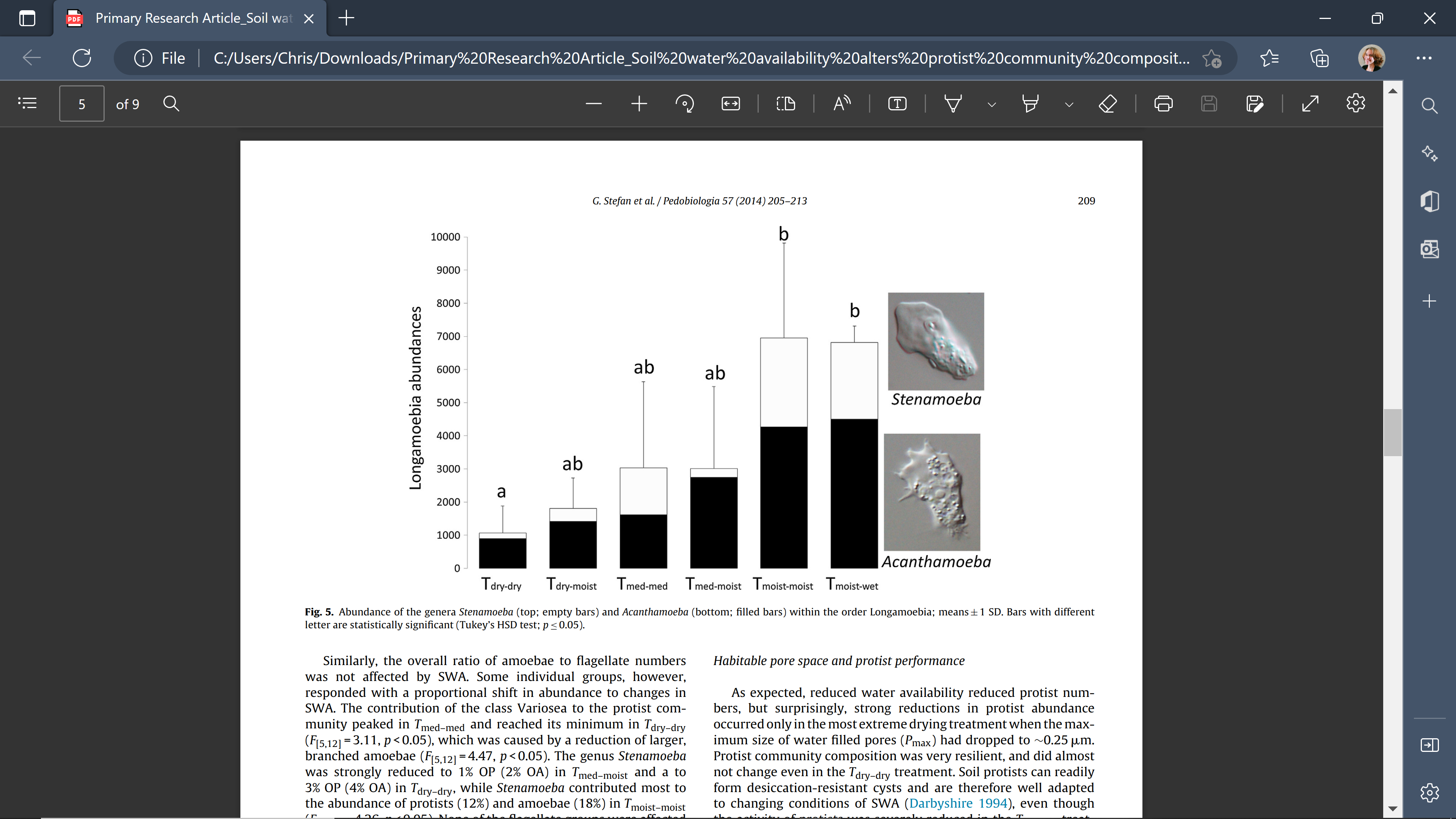
Elements—Chart or Graph

1. Provide a clear image of a chart or graph.
2. Descriptively labeled axes (what is being measured, what are the units of measurement), and clearly provide numerical labeling of tic marks.
3. Highlight any statistical significance if assessed.
4. Illustrate the variance present within the group sampled (error bars) if applicable.
5. Include a legend that explains any color or line-style coding.

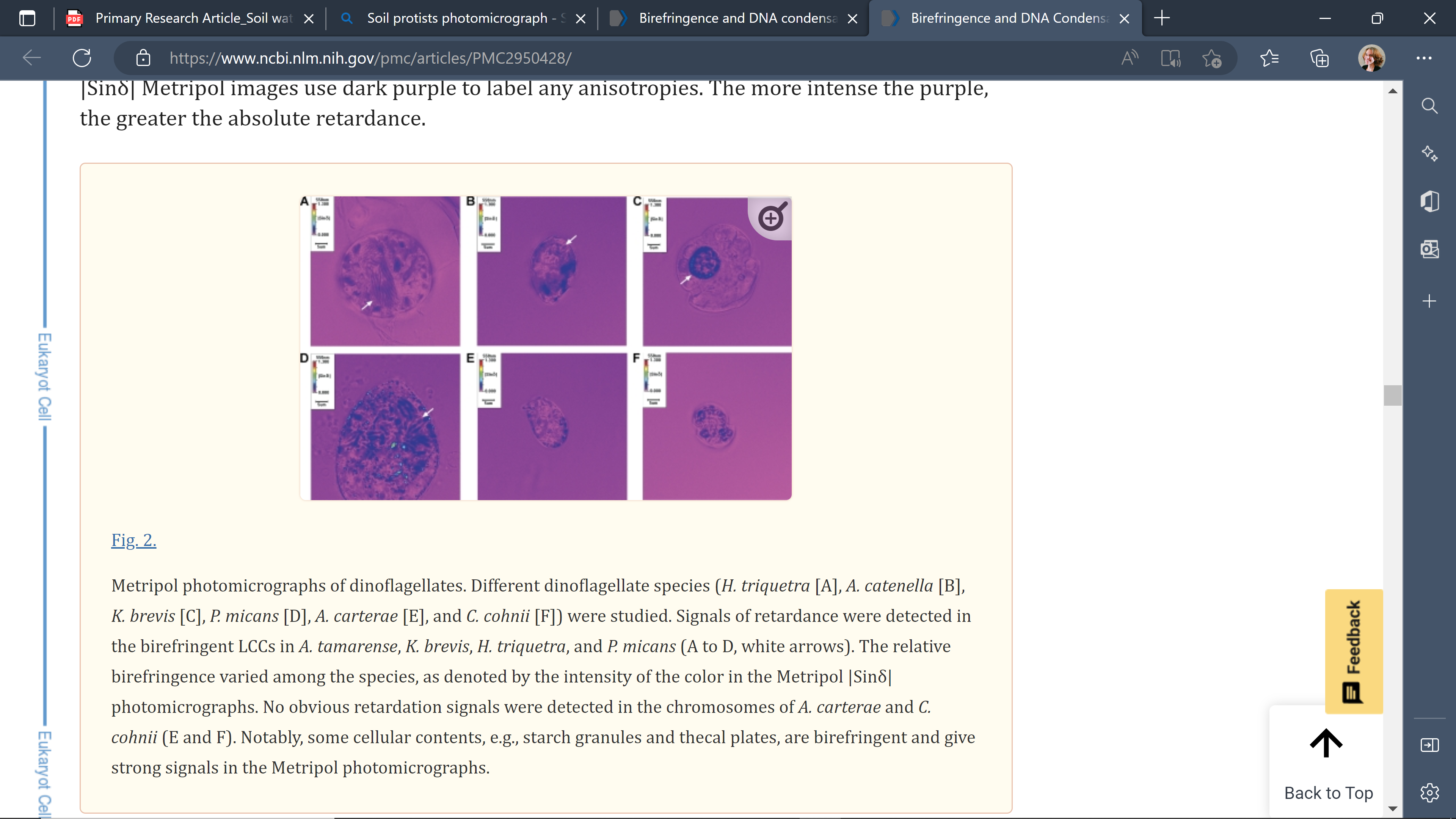
Elements—Figure Legend

1. Figure number (if referred to in another part of the text, poster, or presentation)
2. Descriptive first sentence that tells the reader what this image is about (its subject matter and its functional importance/take-home message for the image). This first sentence may also be used as a figure title in posters.
3. Description of each panel (if using a multi-panel figure) starting with the panel label and followed by the experimental condition, any special features to note, or describing the subject/importance of any key feature indicators.
4. Description of how the illustrated information relates to the experimental hypothesis \*if presented on a poster.\*

**Example 1:** Chart elements and figure legend. Please note how the elements of the chart (including axis labels) are used together with the content of the figure legend to help the reader understand the purpose of the image. Deeper explanations are made within the rest of the research report; however, on a poster, the legend would also include some explanation as to how this information relates to the research question/hypothesis testing as a whole.



From Stefan *et al* (2014). Soil water availability strongly alters the community composition of soil protists. Pedobiologia. (57):205-213.



**Example 2:** Using photographic images as data. Here you can see how the authors have used panel labels on the image and incorporated key-feature indicators (white arrows) to highlight the main information they want readers to note. Please also note that because their technique uses colors to indicate various features, color bars are included with each panel along with a brief explanation of what the mean in the figure legend.

From Chow *et al* (2010). Birefringence and DNA condensation of liquid crystalline chromosomes. Eukaryot Cell. (10):1577-87. doi: 10.1128/EC.00026-10.