*Leaf area*

Leaf area (cm2) is the area of a given leaf. To measure leaf area, you will:

1. Locate your scanned image on the computer.
2. Open the “ImageJ” application.
3. Click “File” > “Open”
4. Find your image.
5. Open your image.
6. Click the straight-line segment icon and draw a 10 cm line on your image using the scale. You may need to zoom in using the magnifying glass icon first.
7. Click “Analyze” > “Set Scale”
8. Type “10” in the “Known Distance” box.
9. Type “cm” in the “Unit of length” box.
10. Check the “Global” box.
11. Click “OK”.
12. Using the magnifying glass tool, hold shift and click to Zoom back out to the original size.
13. Click “Image” > “Type” > ”8-bit”.
14. Click “Process” > “Binary” > “Make Binary”.
15. Click the rectangle icon to draw a rectangle around your leaf, keeping all other objects outside of the rectangle.
16. Click “Edit” > “Clear Outside”.
17. Click “Analyze” > “Analyze Particles”.
18. Click “Ok”.
19. Record the “Total Area” in your datasheet under the column “leaf\_area”.