

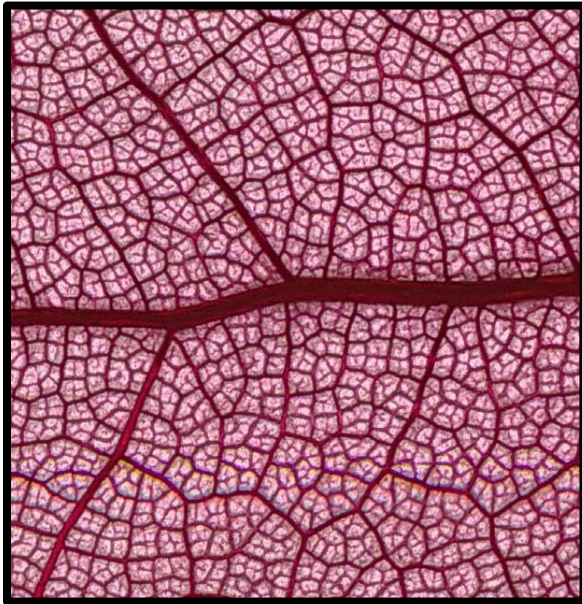
What you should know about using the LEAF GUI software

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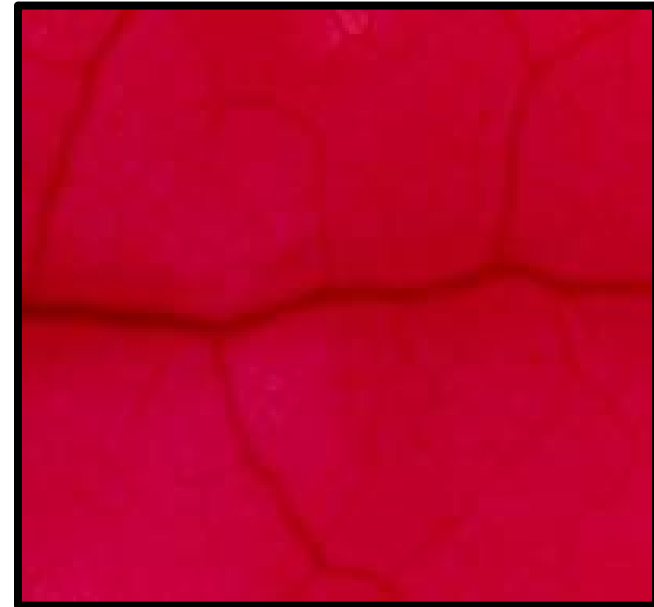
(on behalf of my coauthors)

When to use LEAF GUI

- LEAF GUI works best on images where there is good contrast between veins and image background.



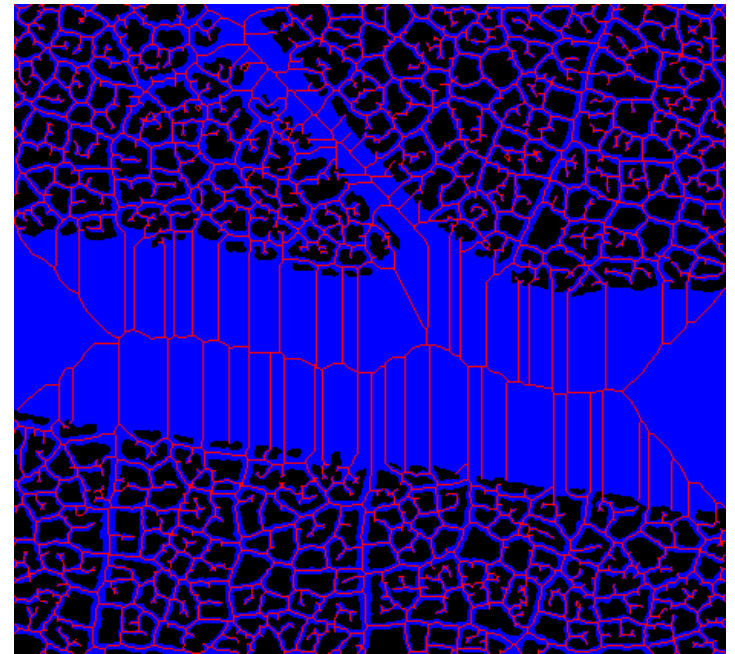
Good Contrast



Not So Good Contrast

Moderate Resolution

- If images are very high resolution, the skeletonization algorithms upon which the *Vein Stats* function relies may create spurious *Edges*, or artificially increase *Edge* lengths, particularly in the largest veins
- Down sampling can reduce resolution and Pruning can help remove spurious *Edges*



Dramatic example

Use good images

- The results from the software are heavily dependent on the quality of the initial images.
- Taking a little extra time beforehand to improve image quality will go a long way toward improving the software's performance.

Patience

- Areole Stats, Vein Stats, Thresholding and Pruning can take a significant amount of time.
- We are working to link a LEAF GUI web interface with some super-computing power, but this may take a while.

Patience

- Almost all of the functions in LEAF GUI are interruptible meaning that if a new function is invoked too soon, the previous function may not have finished.
- Thus to avoid confusing results from “click happy” users, patience is advised.