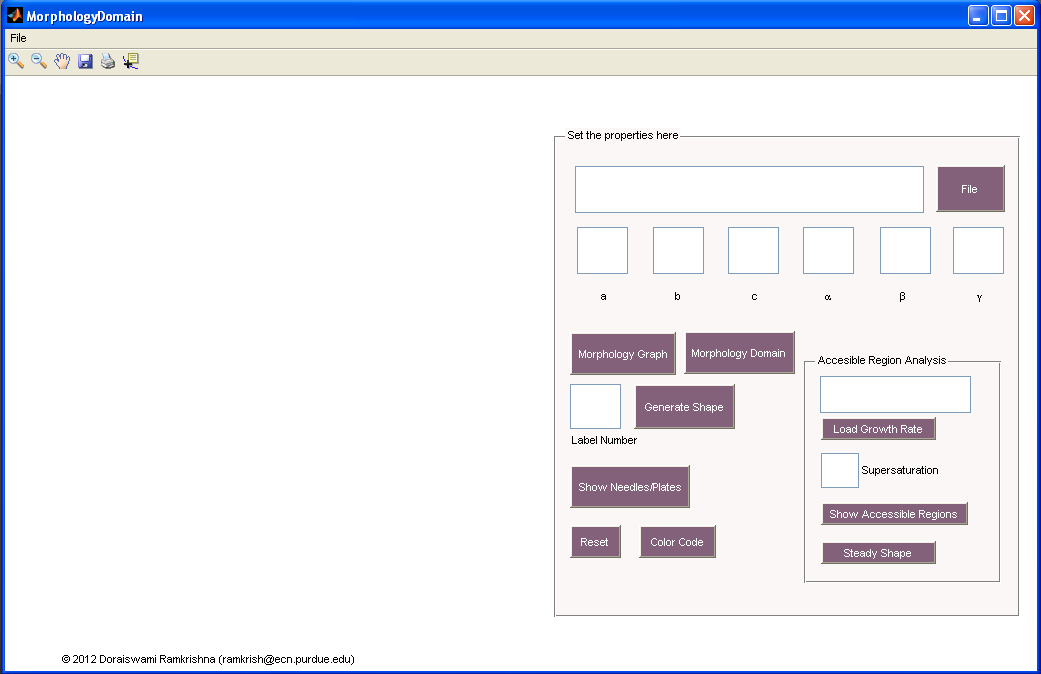
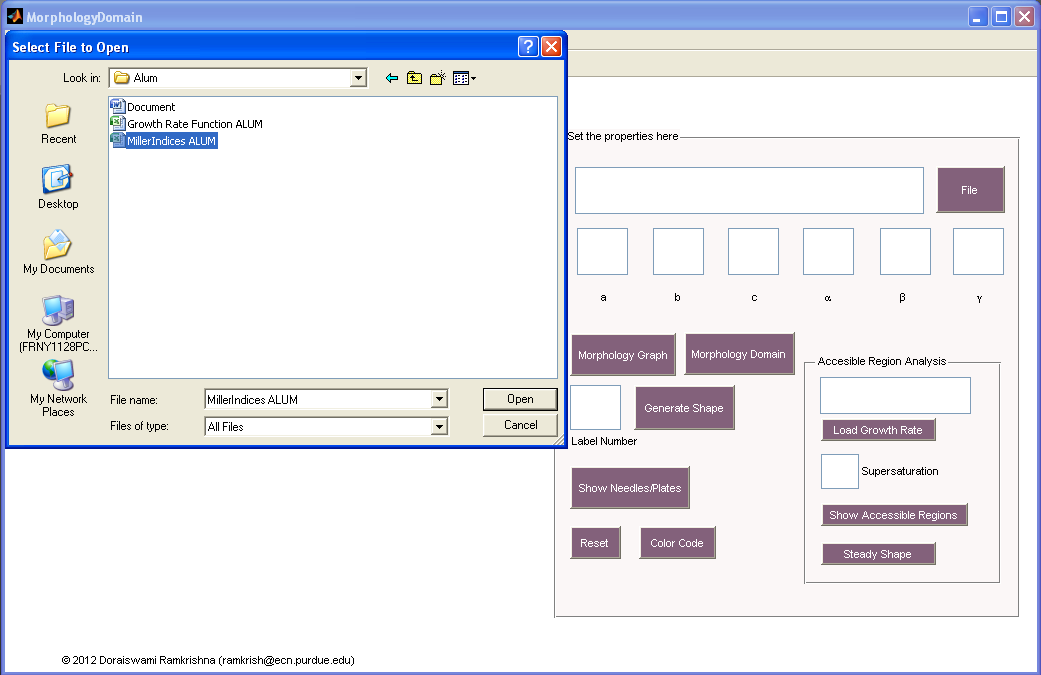
**EXAMPLE 1: ALUM**

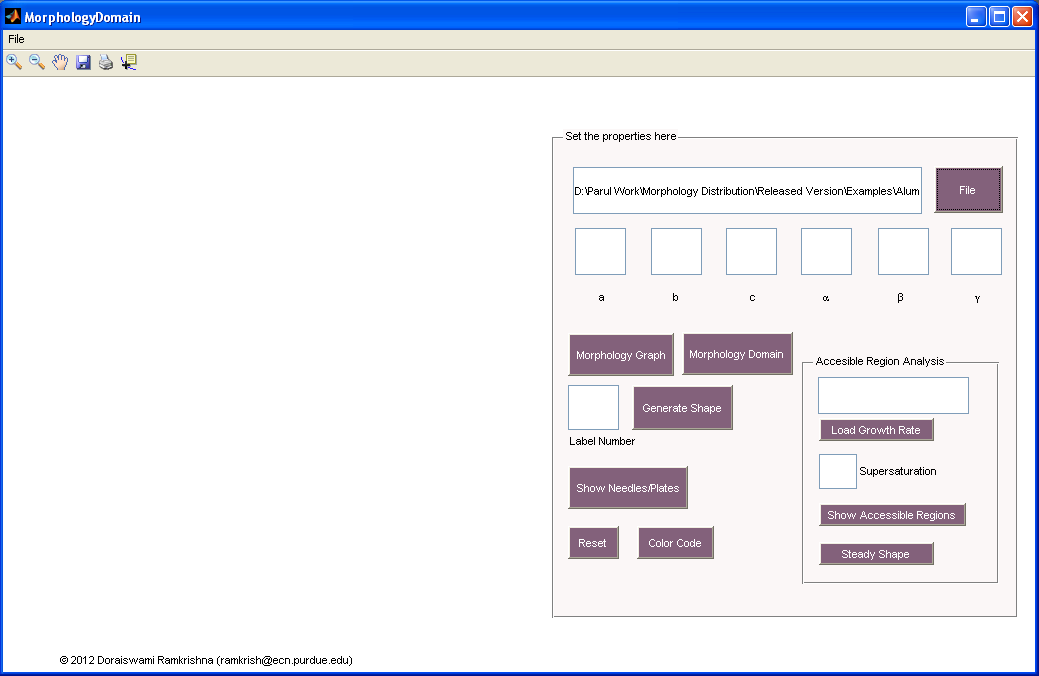
**Step 1:** Choose the Alum Miller Indices excel sheet after clicking on “File” button.



**Figure 1:** MorphologyDomain window opened on running the morphologydomain.exe file

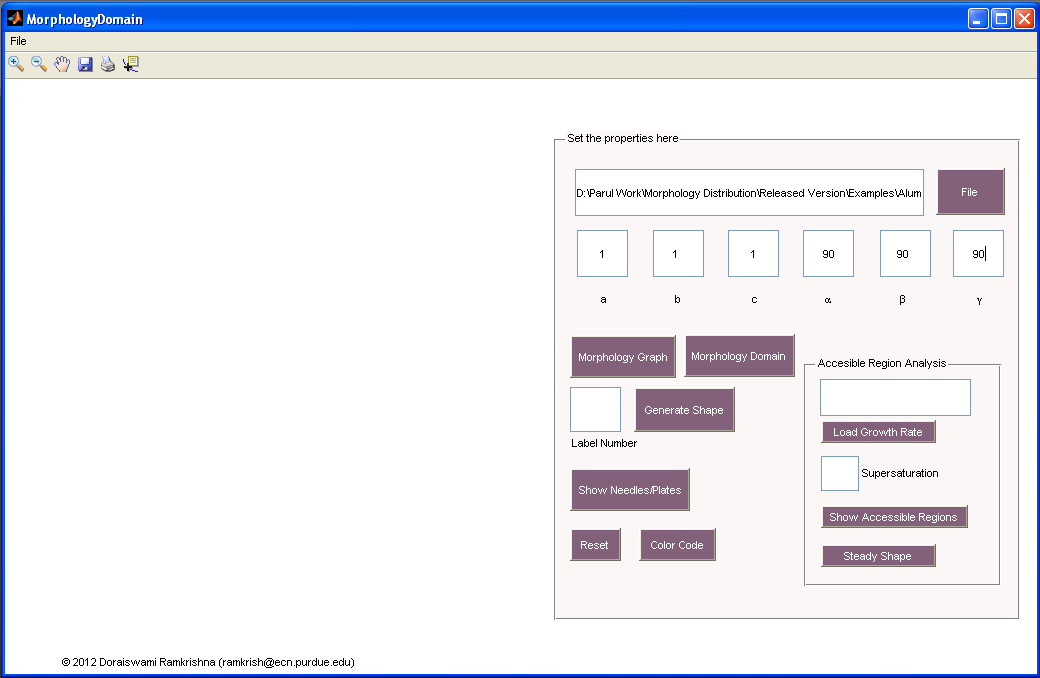


**Figure 2:** Selecting excel file with appropriate Miller indices



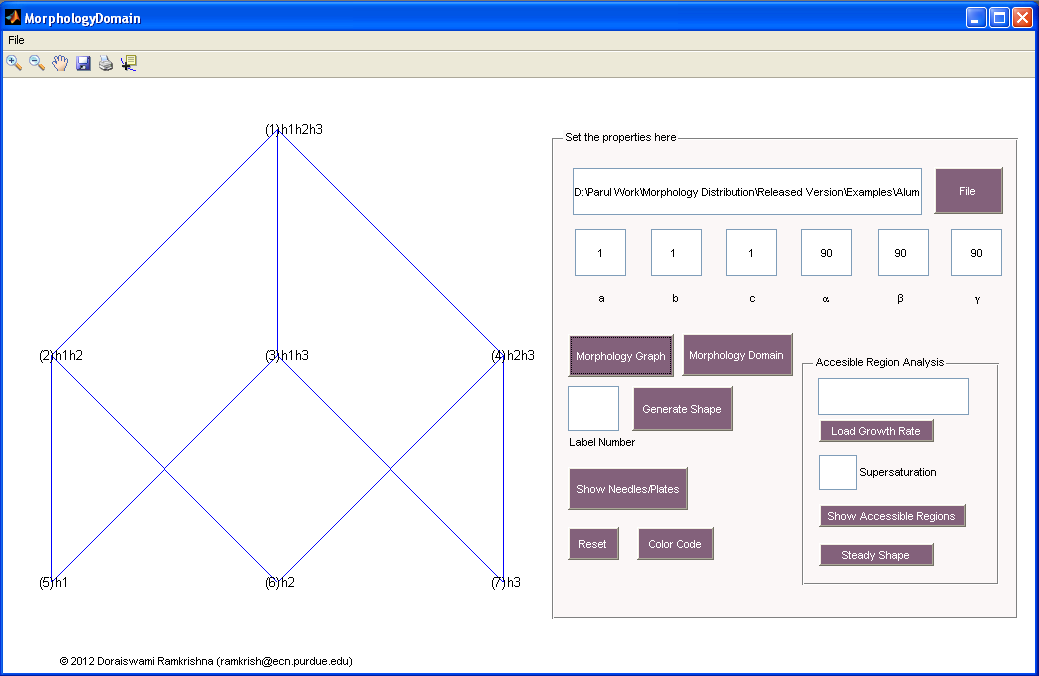
**Figure 3:** After excel file has been read

**Step 2:** Type the Lattice parameters.



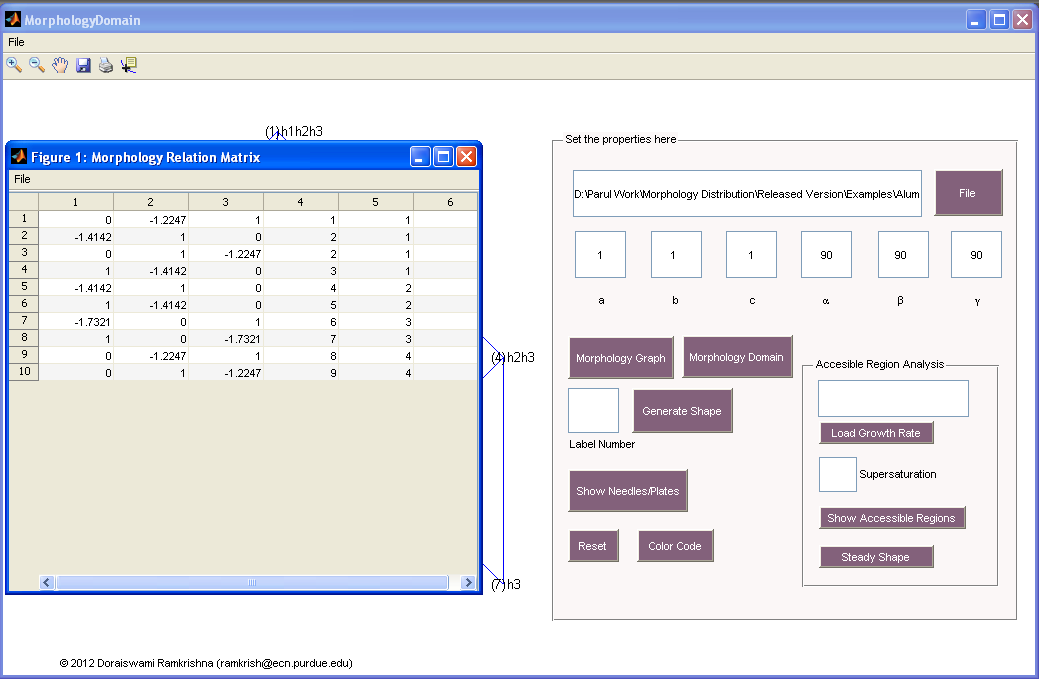
**Figure 4:** Typing Lattice parameters

**Step 3:** Click on “Morphology Graph” button to see the tree plot.



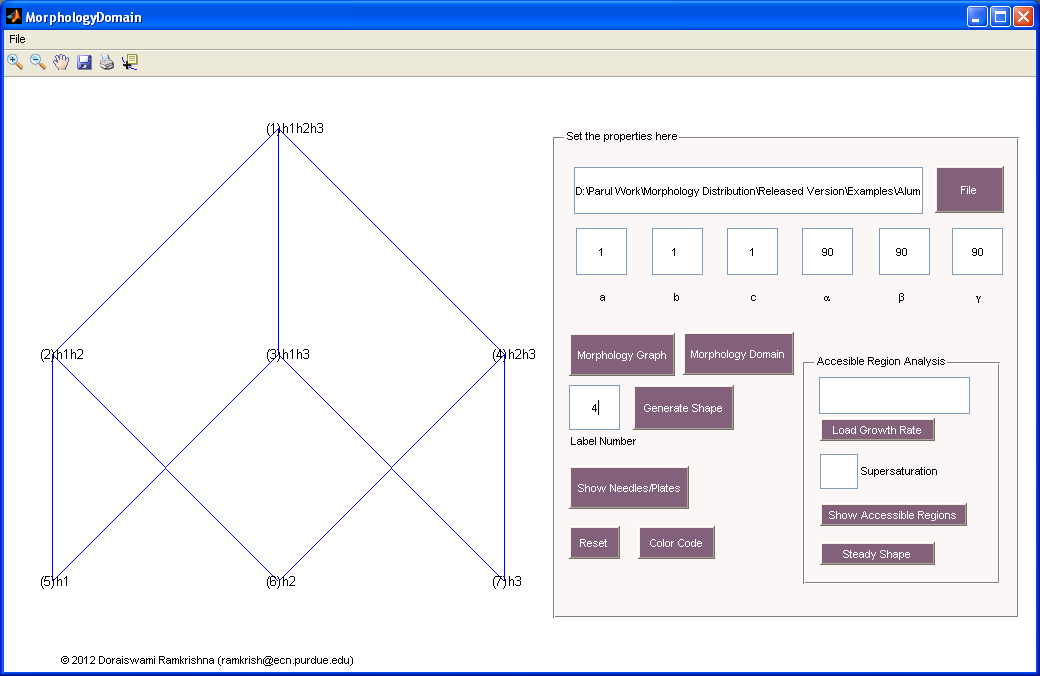
**Figure 5:** Tree plot

**Step 4:** Click on “Morphology Domain” to see the morphology relation matrix.

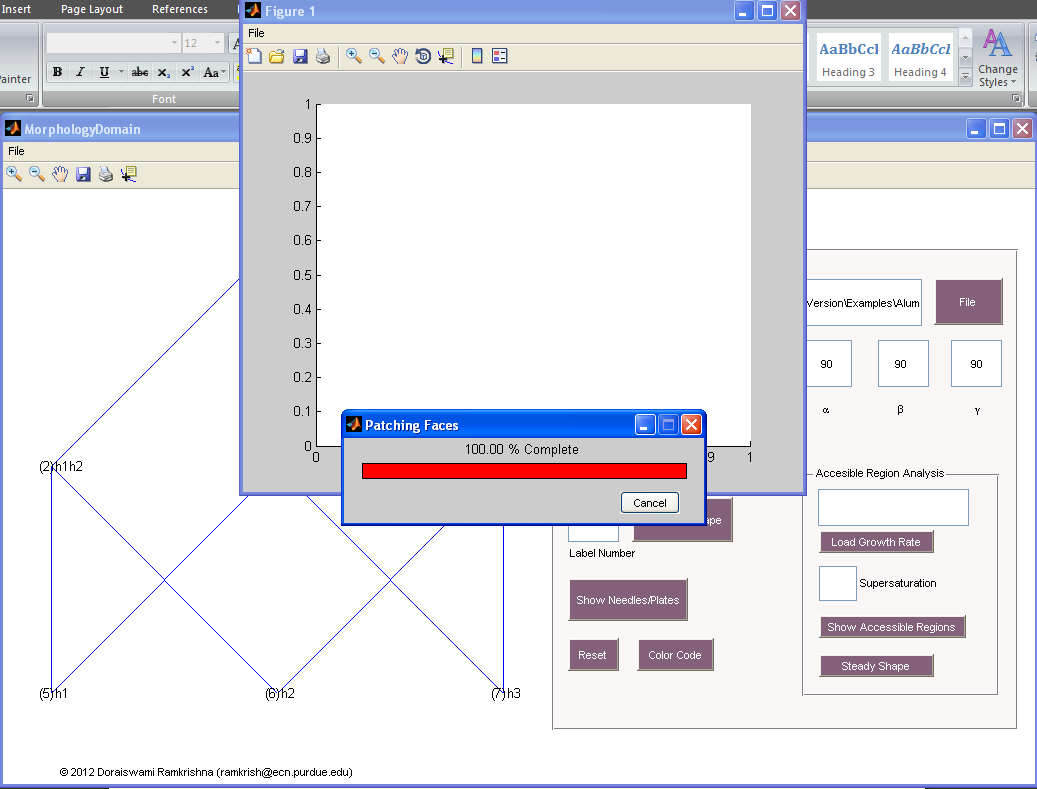


**Figure 6:** Morphology Relation Matrix

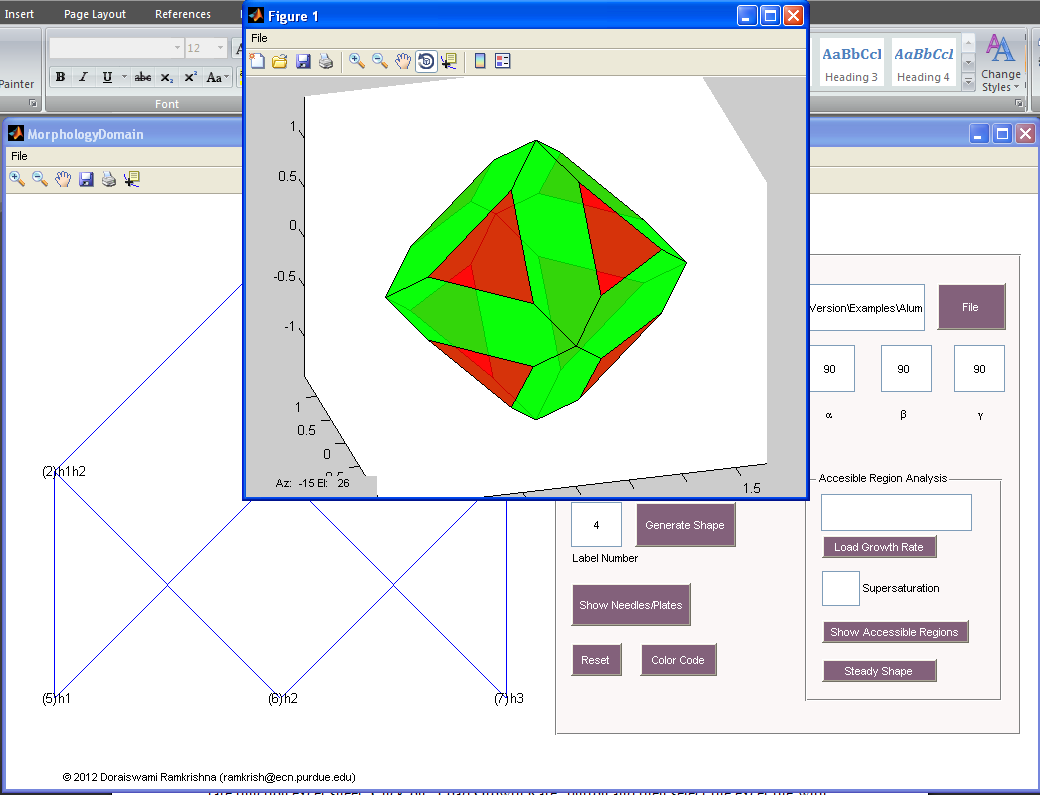
**Step 5:** Type the label number of the morphology which you want to see and then click on “Generate Shape” button.



**Figure 7:** Typing label number

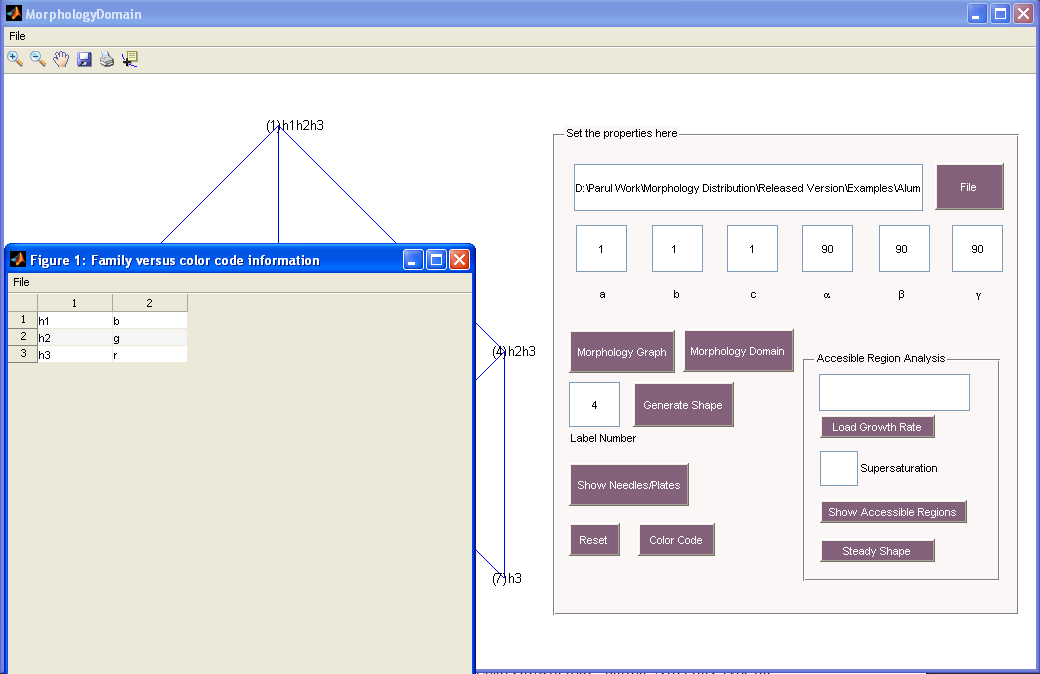


**Figure 8:** Waiting for shape to generate for the label number



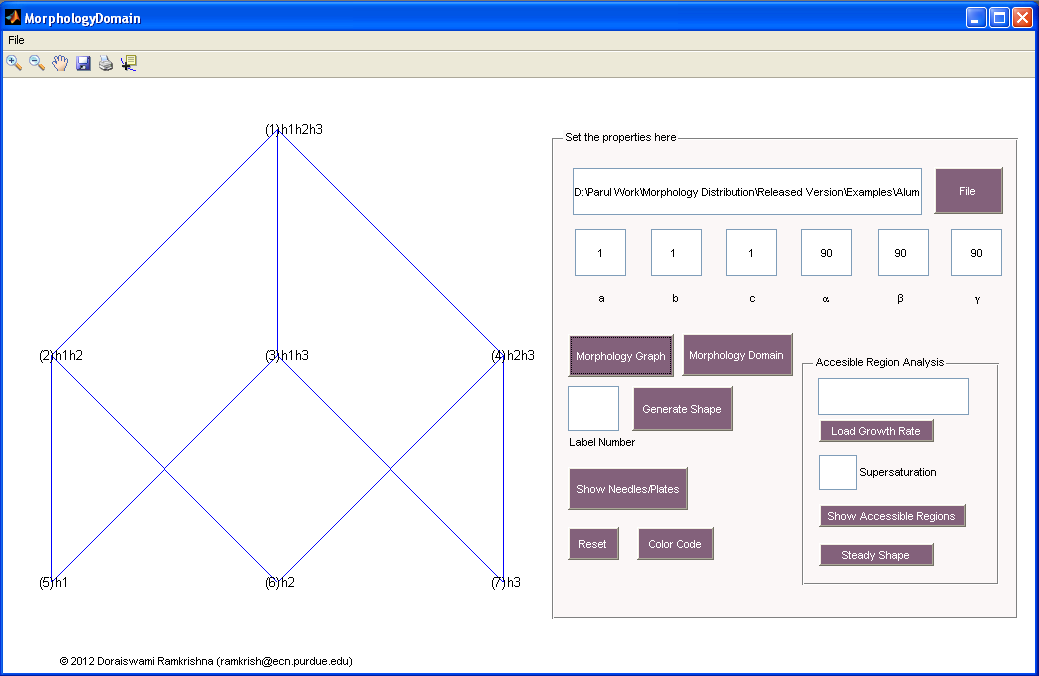
**Figure 9:** Generated shape for the given label number

You can click on “Color Code” to see the geometric families versus color code information.



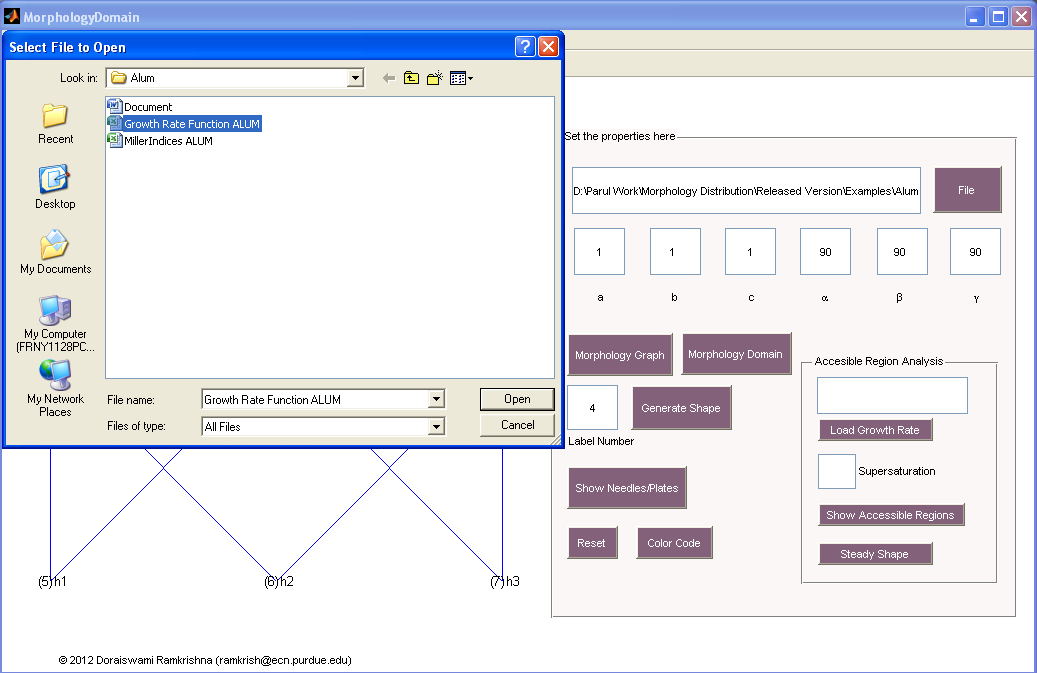
**Figure 10:** Family versus color code information

**Step 6:** Click on “Show Needles/Plates” button to see potential needles/plates.

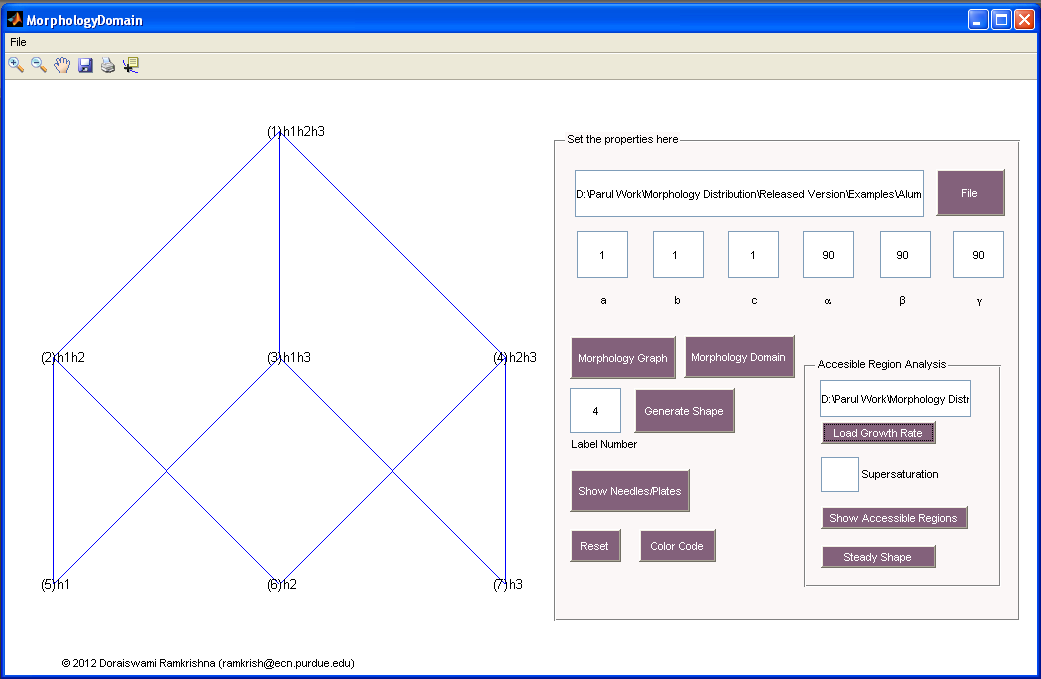


**Figure 11:** On clicking on “Show Needle/Plates”. No changes here since Alum will never form needles/plates

**Step 7:** For accessible region analysis, firstly select the excel file with the growth rate for the crystal. For this, click on “Load Growth Rate” and then select the file.

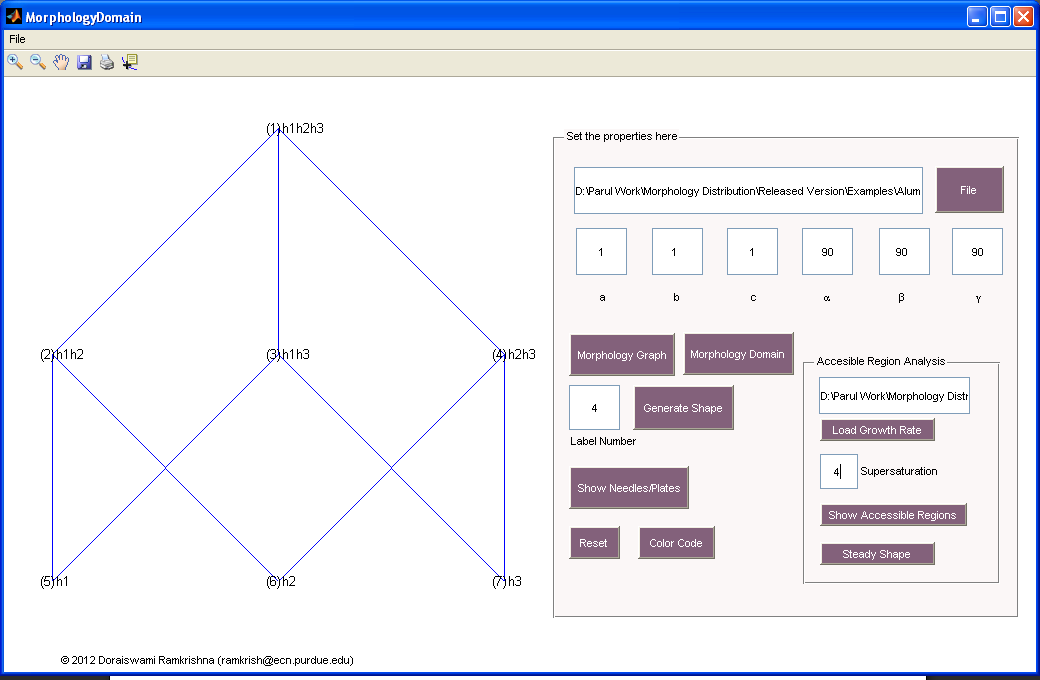


**Figure 12:** Selecting the excel file for growth rate function

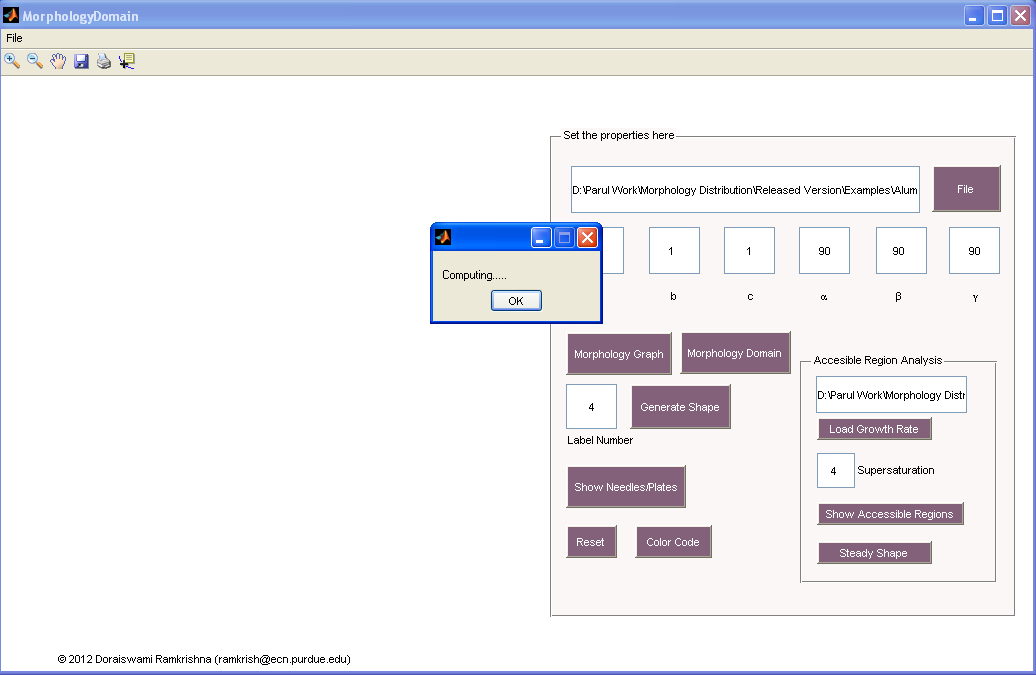


**Figure 13:** After selecting the excel file

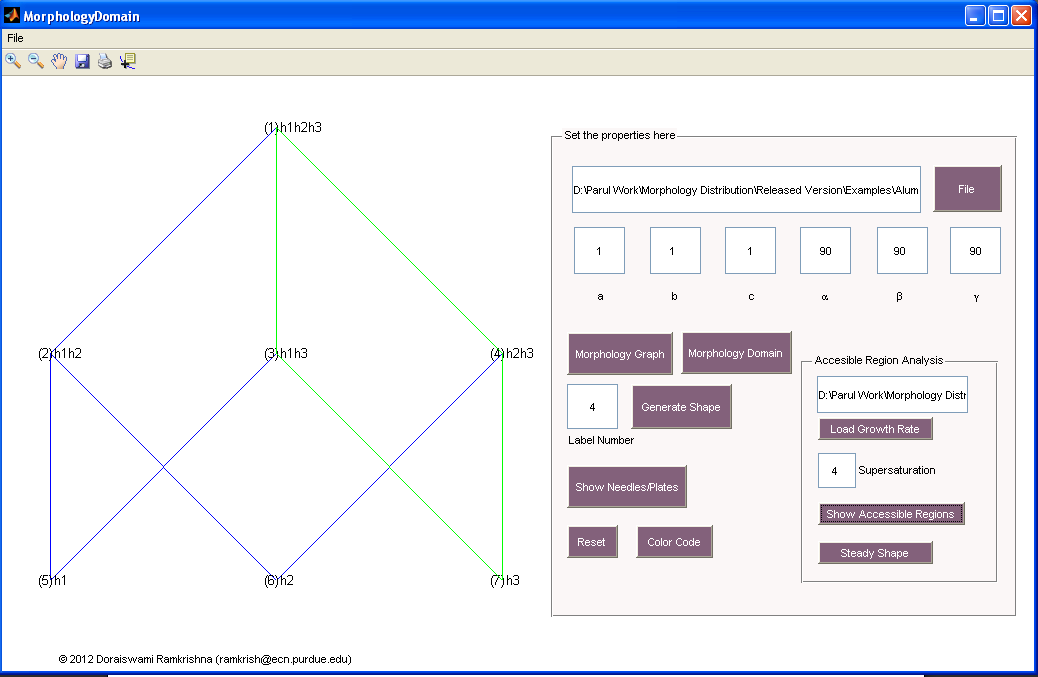
**Step 8:** Type the supersaturation value and then click on “Show Accessible Regions”. Accessible regions will be green



**Figure 14:** Typing the supersaturation value

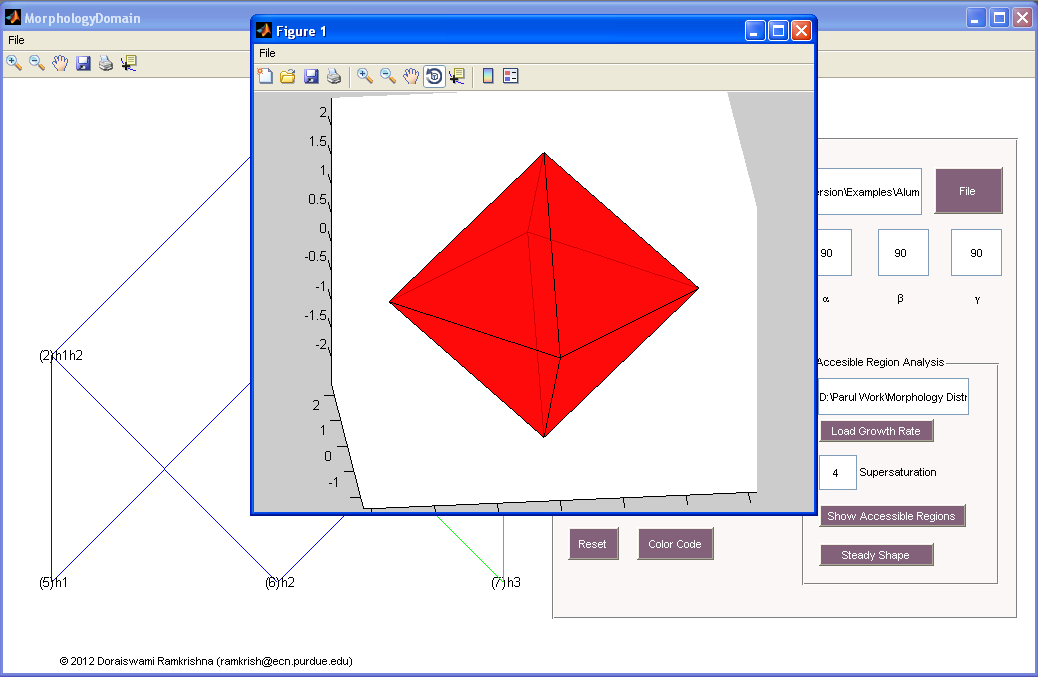


**Figure 15:** Waiting for the plot



**Figure 16:** Accessible regions plotted green

**Step 9:** To see the steady shape, click on “Steady Shape” button.

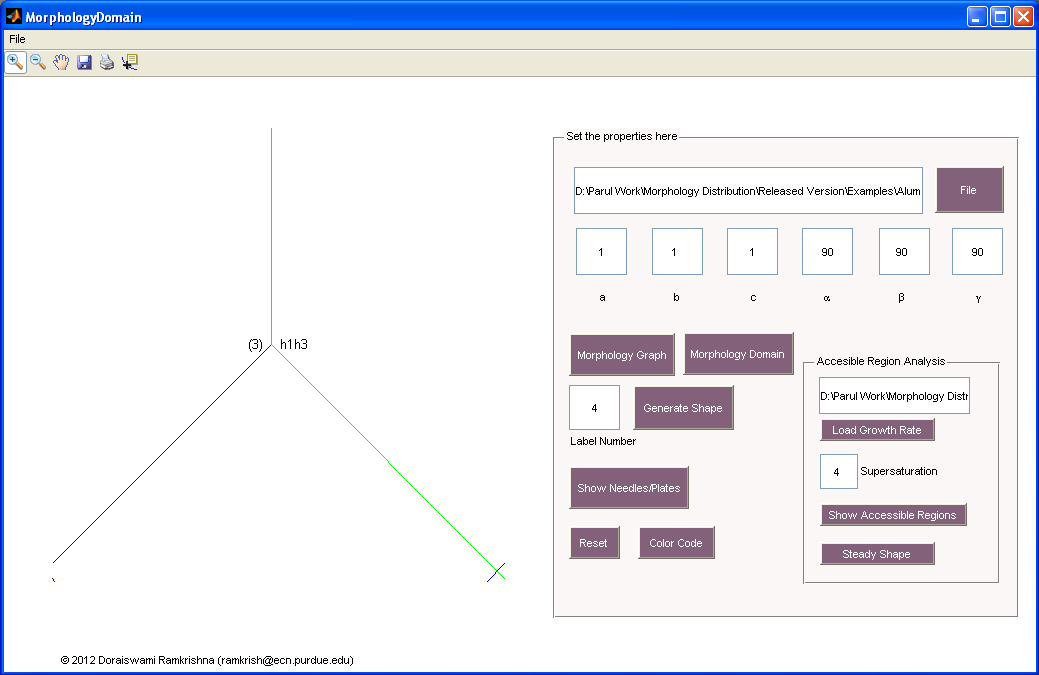


**Figure 17:** Steady shape for the given supersaturation value

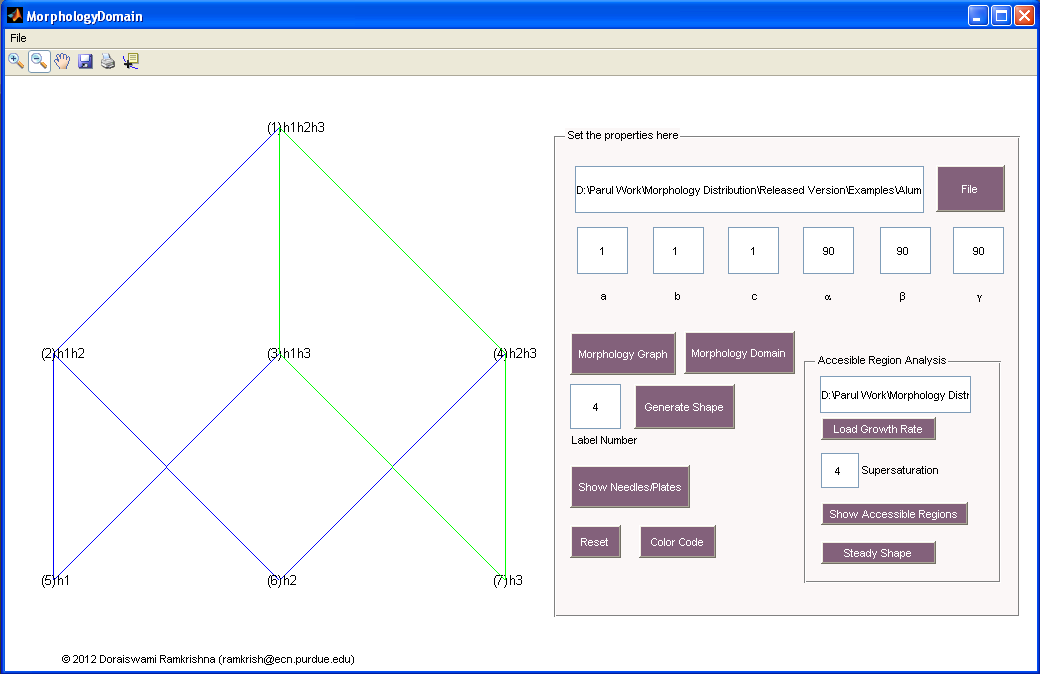
You can zoom in, zoom out and pan the plot image using the toolbar options.

You can also save the plot as an image in the format you want. Note that if you save, the whole window image will be saved along with the plot. To save, go to “file” in the menu bar and then click on “Save as”.

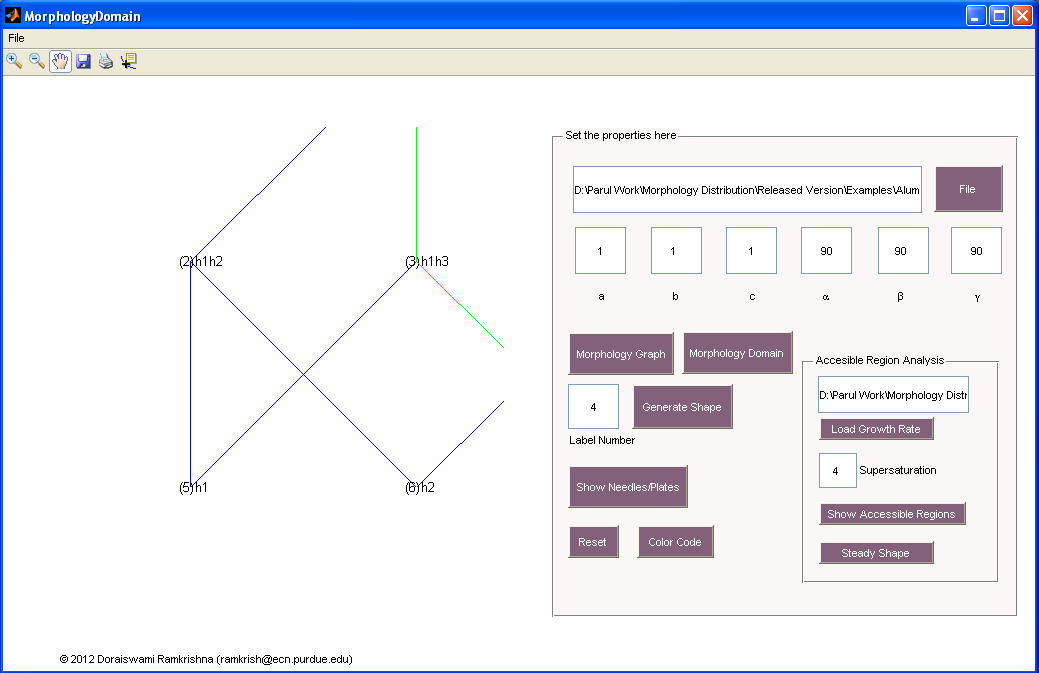
To resume back to the original setup of the image, double click on the plot image with any of the toolbar options. This means that select any of the tool bar options, and then double click on the plot image. Then, the plot image will go back to its original size and placing.



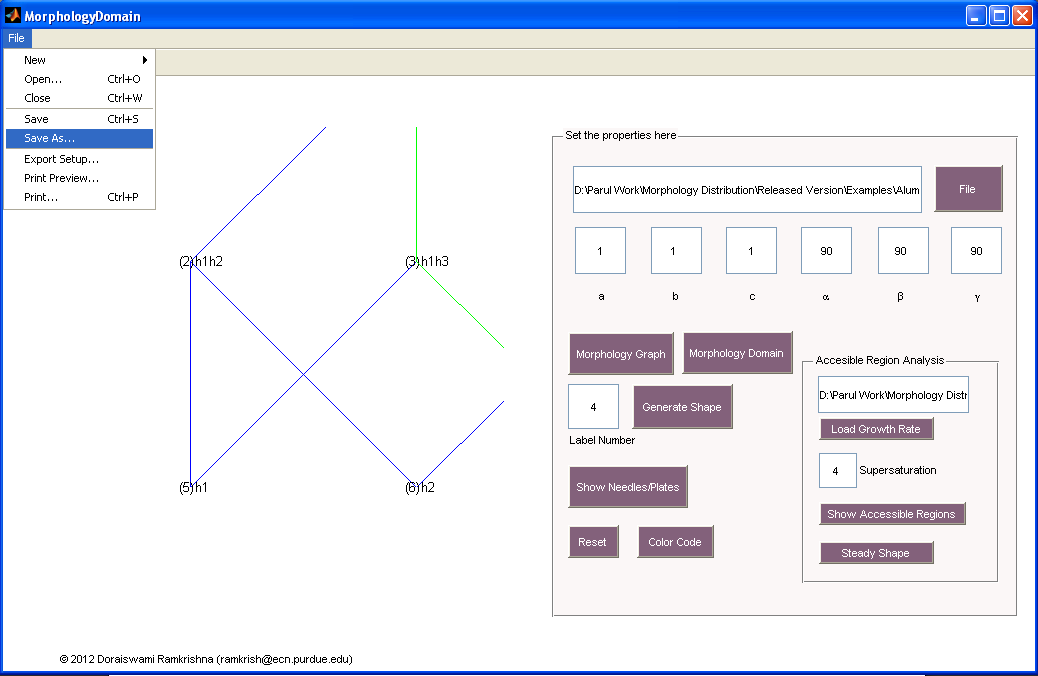
**Figure 18:** Zoomed in plot image



**Figure 19:** Zoomed out plot image



**Figure 20:** Panning plot image to the right



**Figure 21:** Saving the figure