

**Notes on Zstack software, as passed along by Rob Cuthrell  
Lab report #73,**

*Taking photos using MicroSuite:*

Pull up MicroSuite edition software.

Get item into focus in video mode.

Start at the “top” of the object.

Change focus slightly (focus in). Dial one hatch mark/number on fine focus at a time, perhaps half a notch for phytoliths, perhaps a full notch for seeds.

Click on camera icon to take a photos.

Continue taking a series of photos. Focus in slightly further for each shot, finishing when the edges (or center) becomes blurry. The item has been fully photographed, from edge to center (or one side to the other), when you can no longer take a photo where an aspect of the item is in focus.

Highlight the set of photos. Click “save” under “file”. Create a new folder in the dialog box. Save the series of photos in this new folder.

*Stacking photos :*

Open CombineZP program.

Click “NEW”. Navigate to new folder that contains photo files. Highlight all files. Dialog box shows files being opened (scrolls through).

Click “GO”. Dialog box shows files being stacked (scrolls through).

If image does not look good (i.e. has a lot of “noise”, or is blurry at edges), check in dialog box, to remove pictures (manually, from folder) that have offset x or y axes. An offset of 1 is not bad. Click on box to remove files from folder (delete or move). Then, reselect, and restack.

[On a side note, single phytoliths may not work especially well in zstack; plates or large sheets of phytoliths work better.]

*Stitching photos:*

To stitch photo together horizontally, go to “Photo Stitch”. [“Hug In”, application, renamed]

Go to the field of view dialog box. For HFoV—enter “1” for 1 degree (flat plane).

Center image manually, then use sliders to get rid of black space.

Click “create panorama”, then save it with another file name.