## How to Set Up Images with Rootfly

**By Renee Wang** 

- 1. Open Rootfly on Windows XP
- 2. Click "File" then select " New"



## 3. Select folder, a pop up window "SelectImage File Format" will show up



4. Click on "Date" under "Included" box,then select "Date Format"

<b>¥ Rootfly</b> File Edit View Help	Debug
Window	Select Image File Format
	Reset to Bartz ICAP       Image File Format       Delimiter:        Extension:     jpg
	Not Included     Included       Misc 1     Misc 2       Misc 3     Add →       Misc 4     Oate       C-Remove     Session       User Initials
	Up       Down         Prefix:
	Sample file in chosen directory (Set the format to match the filename): 20110601201516-5111-139384-0271-2170_000001.jpg OK Cancel

5. "Order of Elements" will be <u>mm/dd/yy</u>.
With "Year Format" in <u>2 digits</u>. Then select "ok" twice.

Rootfly		
ile Edit View He	Help Debug	
Window	Select Image File Format	
-	Reset to Bartz ICAP	
	Delimiter: _ Extension: jpg	
	Modify Date Format 🛛 🔀	
	Order of Elements         Year Format           Month:         1         Day:         1         Year:         1           2         2         2         2         2         1           3         3         3         3         3         1	
	Element Separator:	
	Format:       [expt]_T[tube]_L[win]_[yyyy.mm.dd]_[time]_[sess]_[user].jpg         Sample file in chosen directory (Set the format to match the filename):         20110601201516-5111-139384-0271-2170_000001.jpg	
	OK Cancel	

6. Go to the first image by click on it at the bottom of the page.

7. Click on "**Edit**", and select "**Calibrate image**" from the drop down menu.



8. You folder will pop up and you can click open any image in that folder for calibration.Remember, you only need to calibrate the imagesONCE at the beginning of the analysis!

9. Once you open an image for calibration, use the green cursor box and draw a horizontal line across the image. Make sure there is no breaks in the green line and it show be aligned with the borders on the right and left. Then, change the pixel number at the bottom to

**30.1mm!!!!!!! (VERY IMPORTANT).** Once done calibrating, click "**OK**".



10. Click on "**Annotate**" on the right, and begin digitizing. You need to annotate each image, as it will copy all the hyphae you traced from the previous image to the next.

11. To begin tracing, we need to click on "**New Root**" and we trace around the borders of the image to created a "Field-of-view". We ONLY trace hyphae and roots activities inside the file-of-view. Make sure to click on "**New Root**" for EACH border. Also, lines should be drawn in order (see image





12. Now that you have the field-of-view, you make start tracing. Record the length and diameter on your sheet. Make sure your first root is #5 because root #1-4 are borders for field-of-

view.



13. *DO NOT FORGET TO SAVE YOUR WORK!!* (Format for saved document should be File name\_mm.dd.yy\_initial)

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