DBG Specimen Card Imaging Protocol

Note: This is for the current (as of 2/2018) Research & Conservation Printer, "Research – HP Color LaserJet Pro MFP M477 PCL 6 on DBGFS01"

For posterity, and in case of changing printers/scanners in the department, at the very end of this document are protocols for the old way of scanning. Discuss with the Herbarium Curator & Database Associate before using these other protocols because the scans are lower quality and the time commitment is much longer. In the case of future printers and scanners, there are probably similar drivers for scanning, and a similar set of protocols could be followed as outlined below.

I need to: (click one)

Download & set-up the software to scan Mycology Cards. Scan & save the scans of Mycology Cards. I already have the software set-up.

Downloading & Setting-up the Software to Scan Mycology Cards

Step 1: Download the drivers for the printer. IT may need to assist with this or give you permissions to download & install the package.

- Download the "Full Software and Drivers" that goes with the current printer.
 - o <u>https://support.hp.com/za-en/drivers/selfservice/swdetails/hp-color-laserjet-pro-mfp-m477-series/7326560/swltemId/t2-139791-7</u>
 - If your operating system is not Windows 7 (64-bit), you will have to get the "Full Software and Drivers" package associated with your operating system.
- After you have completed installation, you should have the software "HP Scan" on your computer. At the top, it says "HP CLJM477 Scan Driver."

Step 2: Create the Scan settings for Mycocards.

- 1. Open the "HP Scan" program.
- 2. Make sure you are under "Save as JPG". Change the following options:
 - a. Page Sides: select "2-sided (book)"
 - b. Page Size: Custom, 8.25" x 5.25"
- 3. Click "More >"

can Shortcuts elect a task and press the Scan button.	Modified	Scan Shortcut Settings: Save as JPEG	Mo
		Scan	
🚯 Mycology Cards		Item Type	Page Sides
		Document 🗸	2 - sided (book)
🛃 Save as PDF		Page Size	<u></u>
Save as JPEG	8 🤊	Custom (8.25 x 5.25 inches)	Auto Orient
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🔁 Email as JPEG			-
		Image	
Save as Editable Text (UCR)		Color Mode	-
🚯 Everyday Scan		Color 🗸	
		Destination	
		File Type	Send To
		JPEG 🗸	Local or Network folder
reate New Scan Shortcut		Show Viewer After Scan	

- 4. Under the "Scan" section, change the following options:
 - a. Resolution: 300

can Shortcuts	Detailed Scan Shortcut Settings: MycologyCards	Let
elect a task and press the Scan button.	Scan Item Type	
MycologyCards	Document Feeder if toaded Document 2- sided (book)	~
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	300 Document Feed	ler if loaded 🛛 🗸 🗸
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- 5. Under "Destination", change the following options:
 - a. File Name: DBG-F-
 - b. Save to Folder: Q:\Research\Images(new)\MuseumSpecimens\DBG\DBG_Cards\DBG_Cards_To_Be_Converted
 - c. After saving the file(s): Do Nothing

HP CLJM477 Scan Driver

6. Click the "+" next to File Type JPG

🚄 HP Scan

Scan Shortcuts	A. 117 1	Detailed Scan Shortcut Settings: Save as JPEG	Less
Select a task and press the Scan button.	B S	Scan Document Document Feeder if loaded 2- sided (book) Custom (8.25 x 5.25 inches) Portrait Top Edge First 300 Image Color (24 bit RGB) Default Exposure	File Type JPEG + File Name DBG-F- Send To Local or Network folder
Email as JPEG Save as Editable Text (OCR)		Document	Save To Folder Q:\Research\Images(new)\MuseumSpec
Everyday Scan Create New Scan Shortcut		Destination JPEG Local or Network folder	 Browse Show Save As dialog box After saving the file(s) Open the file Launch Windows Explorer Do Nothing

Scan

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- 7. Move the file size/quality to "Highest Quality" (100)
- 8. Click "OK"

Scan Shortcute

Scan Shortcuts		Detailed Scan Shortcut Settings:	Less
Select a task and press the Scan button.	Modified	Scan	
💽 Save as PDF		Document File Type Document Feeder if loaded 2 - sided (book)	
Save as JPEG	85	Custom (8.25 x 5.25 inches) File Type Portrait Top Edge First 300	~
🔁 Email as PDF		Image Separate fil	e for each scanned bage
🔁 Email as JPEG		Color (24 bit RGB) Default Exposure File size / quali	ty
Save as Editable Text (OCR)		Document Smallest size	Highest quality
Everyday Scan			
		Destination JPEG Local or Network folder	
Create New Scan Shortcut			OK Cancel

- 9. Click "Create New Scan Shortcut"
 - a. For the name, put "Mycology Cards"
 - b. New Can Shortcut settings are based on: "Current settings"
 - c. Click "Create"
- 10. You should now have the option Mycology Cards on the left which you can use every time you scan Mycology cards. You're done!

Scan Shortcuts		Scan Shortcut Settings:			Мо
Select a task and press the Scan button.	Modified	Scan			
Mycology Cards	8 5	Item Type		Page Sides	
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Save as Editable Text (UCR)		Color Mode			
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_		Destination			
		File Type		Send To	
		PDF	~	Local or Network folder	

- 1. Open HP Scan.
- 2. Select "Mycology Cards" from the left side.

Scan Shortcuts Select a task and press the Scan button	Modified	Scan Shortcut Settings: Mycology Cards		Mor
		Scan		
Mycology Cards	😑 🥌	Item Type	Page Sides	
		Document 🗸	2 - sided (book)	~
🛃 Save as PDF	🖴 🥌	Page Size		
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F Everyday Scan		Color 🗸		
		Destination		
		File Type	Send To	
		PDF 🗸 🗸	Local or Network folder	~
Create New Scan Shortcut		Show Viewer After Scan		

- 3. Load Mycology Cards into the top loader on the printer.
 - a. Pull out any cards that are extra bent, worn, or extra thick (often due to pieces of paper glued to the card). Put those aside to scan later.
 - b. Load cards so they are face-up and the top part of the card (with the "Species Name") is the first part to be pulled through the scanner.
 - c. Do not load too many—the printer can only handle so many before it will get jammed or the cards won't fit in the output tray.
- 4. Click "Scan" on the HP Scan driver. As each card is scanned, it should show both sides of the card in the viewing pane. The image of the cards should all be oriented correctly. If they are not, you may not have put them in the scanner the right way.
 - a. If you did a whole batch wrong (e.g. they are all oriented the wrong way), click "Back" to restart the process.
- 5. Retrieve the scanned cards, keeping them in the order in which they were scanned.

6. Review the preview of the cards on the HP Scan driver. For any cards that should be rescanned (such as it didn't go through the scanner correctly or was misoriented), select <u>both the front and the back</u> of the card, and use the "move to deletion" button to delete those images. An "x" indicates they will not be saved. Put those cards to be rescanned in the next pile you will scan.

HP CLJM477 Scan Driver	=	×
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	-	_
	30/30 Back <mark>Save</mark> Exit	

- Click "Save." Due to the settings, it should automatically open the folder <u>Q:\Research\Images(new)\MuseumSpecimens\DBG\DBG_Cards\DBG_Cards_To_Be_Converted</u> with the file name "DBG-F-.jpg." Click "Save" again.
 - a. If you go to the folder, you will see the scans populate the folder with the naming as "DBG-F-0001," "DBG-F-0002," "DBG-F-0003," etc.
- 8. The cards now need to be renamed with their catalog numbers. Tip: use the Bulk Rename Utility (available online; the Database Associate may also be able to help) to make these next steps much quicker!
- 9. Rename the scans as follows. Remember, the catalog numbers are six digits; add leading zeros as necessary.
 - a. Front: DBG-F-######_C1
 - b. Back: DBG-F-######_C2
- 10. To know which catalog number to rename a file, you can either open the file and look at the scan, or, the files are in the same order as the cards were scanned. You can use the pile of scanned cards, provided they are still in the same order, to know what to change the file name to. Always spot check.
- 11. Once all your cards are scanned and renamed, notify the Database Associate. The Database Associate will convert the files to tiffs, an archival digital format and upload the jpgs to MycoPortal.

OLD (pre-2015) DBG Specimen Card Imaging Protocol

Discuss with the Herbarium Curator & Database Associate before using these protocols because the scans are lower quality and the time commitment is much longer.

Step 1: Scanner Set Up

- Plug both plustek scanner USB cables into computer and set power switch to ON position.
- Open scanner software: DocAction Plustek Mobile Office D412
- Adjust the scanner settings as follows:
 - o Select the Scan option on the left side of the window
 - o Under Color select TIFF Uncompressed
 - o Set Page Size to Automatic Size
 - o Set Scan Mode to Color
 - o Set Resolution to Custom and manually enter 600
 - o Click Apply then OK

If you do not have the proper software installed on your computer, please refer to MycologyCard_Scanner_Installation



DocAction Plustek Mobile Office D412

Button Configura	tion (Plustek MobileOffice D412) Button Template: Scan Utility Description: Scan and open images within the assigned application program.
PDF Scan	Application: PageManager 7 Add Modify Launch only Save Setup Delete File Format
	IHFF Unconnected eder (Duplex) Page Rotation Setting Front Side: 0* Rear Side: 0* Rear Side: 0* Rear Side: 0* Configure Page Size: Automatic Size Continuous Scan Apply Color Matching Auto Density Rear Side: 0* MultiplePage TIFF - Comportability Vertically Rear Side: 0* Continuous Scan Apply Color Matching Auto Density Rear Side: 0* MultiplePage Tiff - Unc Scan Mode: Color Besolution: Custom 600 Auto Density Auto Density Auto Density Auto Density MultiplePage Fill Gamma: • Incon Ihreshold: • Plase Descreer: None Default
Global Settings	OK Cancel Apply Help

Step 2: Scanning Cards

- Adjust the plastic tabs on the front of the scanner to be the appropriate distance apart for the size of the cards
- Open ScanDoc, a folder that is created upon installing scanner software
- Feed the card face-up, top edge first, into the scanner. It will automatically pull the card in a few centimeters
- Press the **Scan** button. The card will then automatically feed through the scanner. The scanner will scan both sides of the card at once
- Once the card has been fully scanned, two new TIFF image files will appear in the ScanDoc folder, with the front of the card being first and the back being second
- Rename the files as follows:
 - Front: DBG-F-######_C1
 - Back: DBG-F-######_C2
- Move all renamed TIFF image files to DBG_Cards_To_Be_Converted



ScanDoc

Step 3: Processing Card Image Files

- Open Image Processing Software Program (Digital Photo Professional is used here)
- In the left window pane, in the folder tab, navigate to DBG_Cards_To_Be_Converted

Edit image window	Tool Select all Clear all
Folder	Collection (0)
	ges(new) Archive BotanicalIllustration Documentation FieldWork HerbariumWork HorticulturalWork magesInProcess .abWork .ogos MuseumSpecimens BoundHerbaria DBG DBG_Cards DBG_Cards_JPEG DBG_Cards_TIFF DBG_Cards_To_Be_Converted DBG_Cards_To_Be_Uploaded

Once all of the thumbnails have loaded click on the Select All button and then click the
 Batch Process button.



- In the Batch Settings Window
 - \circ $\;$ Set the Save folder destination for the compressed JPEG images files to be
 - Q:\Research\Images(new)\MuseumSpecimens\DBG\DBG_Cards\DBG_Cards
 _To_Be_Uploaded
 - Set the Kind of file to Exif-Jpeg
 - o Set the Image quality to 10
 - Set the File name to **Current file name**
- Click Execute to process

Batch settings	X
	Save folder Q:\Research\Images(new)\MuseumSpecimens\DB Browse
	File format Kind of file Image quality
	Output setting Output resolution 350 dpi Imbed ICC profile
	Resize setting Resize Width Height Unit Lock aspect ratio File name Current file name String New file name String Str
<	Image transfer settings Open image using software Browse
	Convert RAW images only Execute Cancel

- After all images have been converted, move all TIFF image files from DBG_Cards_To_Be_Converted to DBG_Cards_TIFF folder
- Notify Database Associate of new images files in DBG_Cards_To_Be_Uploaded folder