

Specimen Digitization @ the Botanical Research Institute of Texas: Imaging Equipment & Protocols

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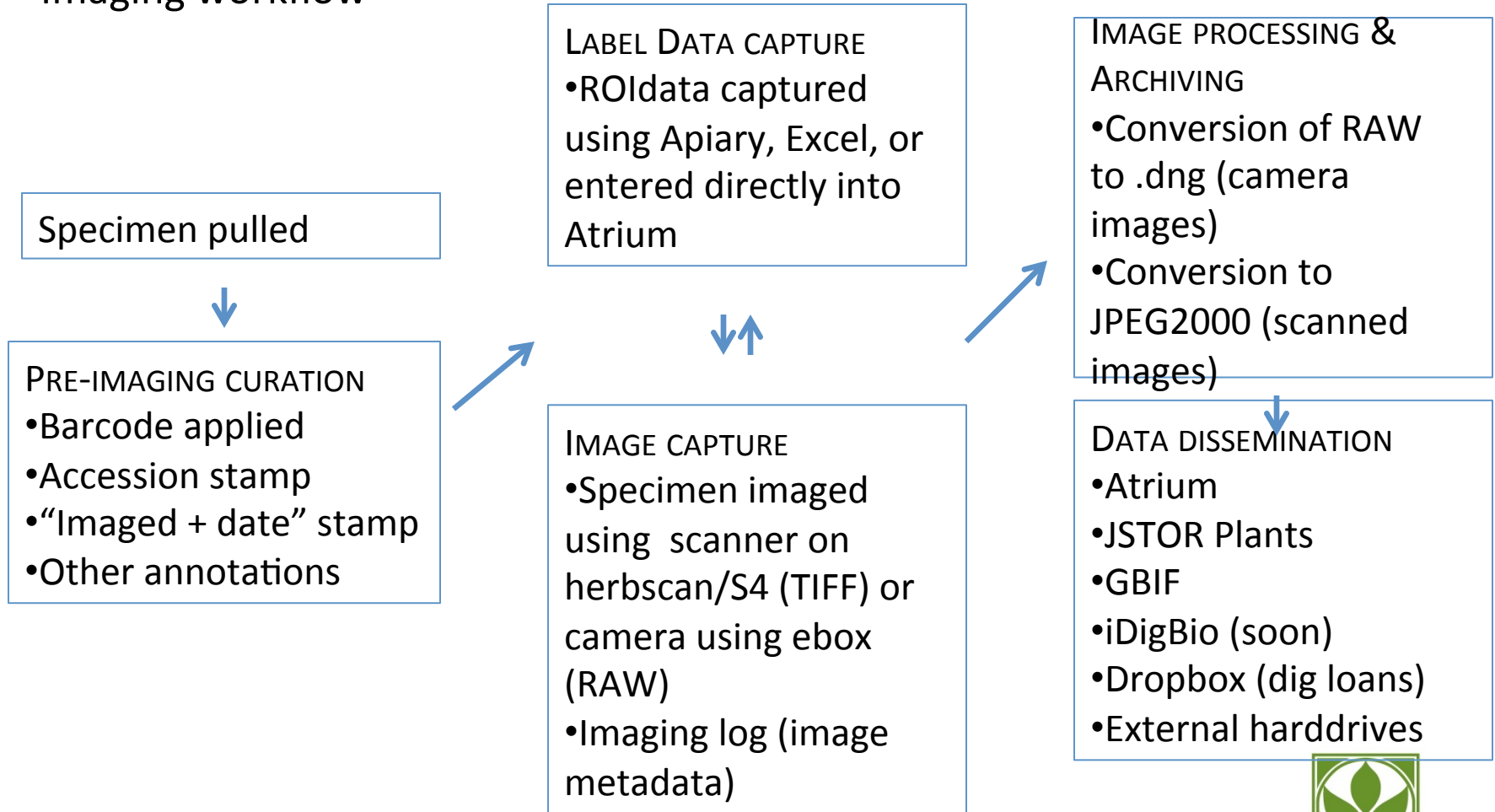
TORCH VIII – iDigBio Workshop



BOTANICAL RESEARCH
INSTITUTE OF TEXAS

Plant to planet.

Imaging workflow



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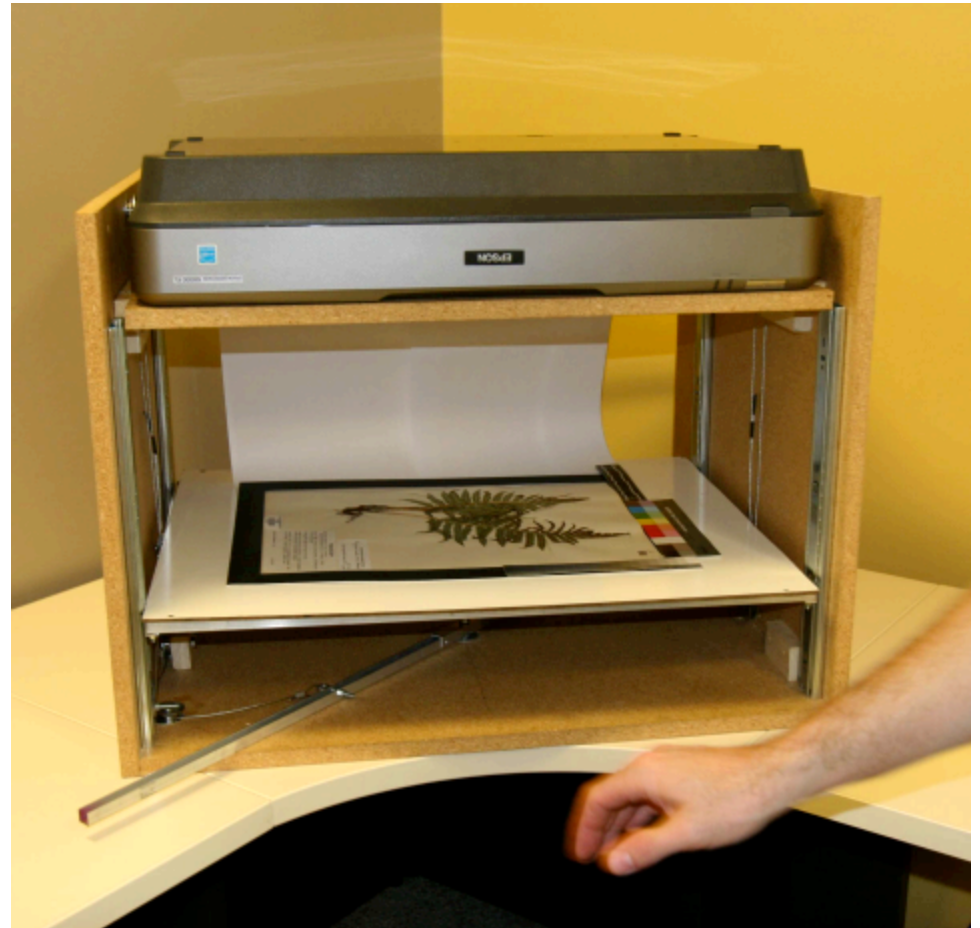
Plant to planet.

Capture device: scanners

Epson Expression 1640 XL
on Herbscan (Kew RBG)



Epson Expression 10000XL-GA
on S4 (J. Best, BRIT)



Capture device: camera & eBox

Canon 5D MarkII body with a 50mm f/2.5 macro lens,
using a Photo-eBox Plus unit for lighting



ADDITIONAL CAMERA EQUIPMENT

- Wooden supports for placing under lightbox, to sides of copystand
- Level for assuring camera lens and specimen are on parallel planes
- AC adapter
- Colour bar/grey scale
- USB tether to computer
- Capture software: Canon provided
- Image Processing: Adobe Lightroom

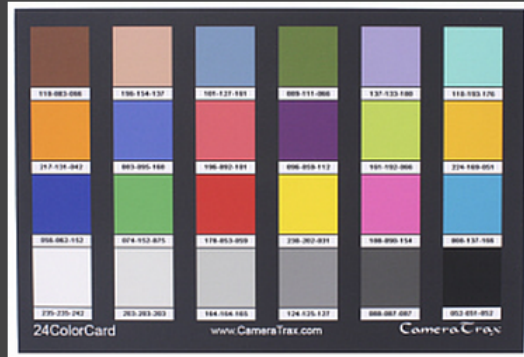
ADDITIONAL SCANNING EQUIPMENT

- Colour bar/grey scale
- Black photo mat to ensure correct placement of specimen and consistent placement of colour and scale bars
- Capture software: EpsonScan

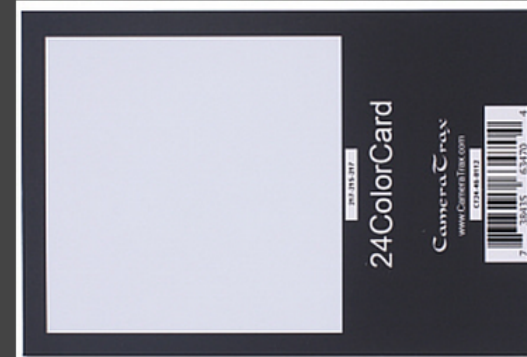
ADDITIONAL EQUIPMENT USED IN BOTH

- Scale bar: Forensics scale (#6-3813), flat color, no-glare plastic, no advertising, 15 cm & 6 in. (redwop.com, ~US\$10 for 10)
- Dedicated desktop
- External hard-drives for back (~3TB)
- Central server
- Image metadata capture: Microsoft Excel

24ColorCard-4x6-V2



24ColorCard-4x6-V2 (4x6-in)



12% GreyCard on Reverse Side

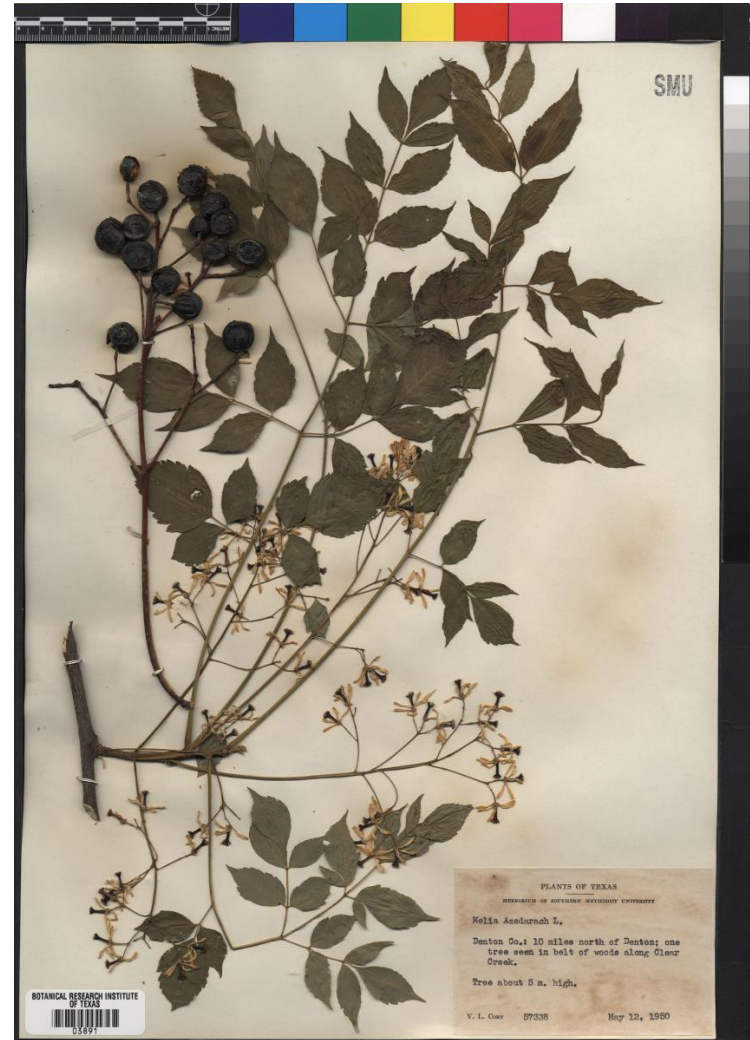
This is the largest of the 24ColorCards but is still a convenient 4x6-inches. It comes in a Tyvek protective sleeve along with simple, clear instructions for color correction procedures using Picasa 3.8, Photoshop Elements 9.0, Photoshop Lightroom 3 and Photoshop CS4. In addition, the 24ColorCard-4x6 has color sRGB measurement data printed directly below each color patch.

CAMERA COLOUR BAR: 24ColorCard-4x6-V2 (http://www.cameratrax.com/color_balance_4x6.php)





SCANNER COLOUR BAR:
Kodak Q-13 Color Separation
(w/ grey scale)
adorama.com (~US\$24)



CAMERAS? SCANNERS? BOTH?

- Original setup and installation of imaging equipment
- Configuration of equipment immediately prior to imaging
- Image acquisition





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