

EOS Utility Settings (MAC):

Manual Focus

Exposure: 1/125 seconds

Aperture: F/5.6

White Balance: 6500 K (Light Box) (4100 K Light Stands)

White Balance Shift: 0,M3 (Note that white balance is affected by open lightbox doors, calibrate white balance shift with doors to lightbox in a closed position.

(MAC) and 0,0,0,0 for (PC)

ISO: 100

Focus: Grouped Center

Capture: Raw

Storage: Computer Only

Picture Style: Faithful

Detail Set: 0, 0, 0, 0

Lens Aberration Correction: Canon 50mm Macro

HDR Mode: Disable HDR

Owner's Name: EKU Herbarium

Author: Eastern Kentucky University Herbarium

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PREFERENCES

Basic Settings:

Show [Camera settings/Remote shooting] screen

Destination Folder

Destination Folder: /Users/ekusherbarium/Pictures/Imaging/{dated folder} (MAC)

Destination Folder: D:/Images/{dated folder} (PC)

Download Images Remote Shooting

Shooting Date

Shooting Date Format: Year Month Day, Delimiter: Underline, YYYY-MM-DD

File Name

Prefix+Number

File Prefix (blank)

Assign Sequence No. :

Number of Digits: 3

Start 1

Shooting Date Format: Year Month Day, Delimiter: None, YYYY-MM-DD

Canon Depth of Field Calculator

http://cpn.canon-europe.com/content/education/technical/depth_of_field_calculator.do

Our Settings:

Focal Length: 50mm

Distance to Subject: 62cm

Aperature: f/5.6 (sweet spot for the Canon 50mm macro lens)

[<http://www.photozone.de/Reviews/161-canon-ef-50mm-f25-macro-test-report--review?start=1>]

Near Focus Limit : 59.7 cm

Far Focus Limit: 64.5 cm

Depth of Field: 4.76 cm

Calibrating White Balance Shift

Turn Photo Ebox Plus On and allow the unit to warm up for 5 minutes before proceeding to the next step (MAC).

Turn on Stand Lights and allow the units to warm up for a period of no less than 10 minutes prior to proceeding to the next step (PC).

Turn on Camera and go to EOS Utility

In the EOS Utility choose under (Other Functions) the 'Test Shooting...' option.

Double Click on the color swatch area of the specimen image.

Hover over the 4th white square from the left of the color swatch, pay attention to the values in the bottom of the screen after RGB:, the values should be close to 240, 240, 240. The maximum value – minimum value should be less than 5, and no value should be more or less than 3 points from 240. If the values do not fall within range, then one needs to Calibrate White Balance Shift.

Calibrating White Balance Shift.

*Ensure that the light box door is always closed when checking or calibrating white balance and white balance shift.

Note that the 3 numbers are representative of the Red, Green, Blue values representing the white block. If a value(s) fall below the required 240, then they require supplementation via the White Balance Shift feature of EOS Utility.

For example; if the values are 236, 240, 242, then one is deficient in the Red component of the White Balance, and will need to boost the Magenta using the White Balance Shift graph, followed by shooting another test image and checking the RGB values again. This may take several tries to correct.

If all values are significantly deficient, such that the RGB values are 230, 232, 229 or similar, one can adjust the exposure time choosing a longer exposure time followed by shooting another test shot and examining the RGB again. This too may require several tries to get the RGB values within the required range of values.