

Taking Photos for DUS growing Test

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(practical guide)**

1. Purpose of taking photos

- To show that **plant growth and growth condition** are suitable for DUS growing test.
- To show **the states of characteristics** of varieties.
- To show **the evidence** that distinctness, uniformity and stability are satisfied, or not.



2. Basic items for taking photos

- **Photo mode**
- **White Balance**
- **Distortion**
- **Flash**
- **Exposure**

Photo mode

- The photo mode should be set on **P (program) mode** or **A (aperture priority) mode**.
- **P mode (program)** : Photos are taken with a **suitable shutter speed and aperture automatically determined based on brightness.**
- **A mode (aperture priority)** : Photos are taken with **a fixed aperture and a shutter speed is determined based on brightness.**



White Balance



- **Adjusting white balance** is very important in taking photos.
- It can appear to the natural color.



not adjusted



adjusted

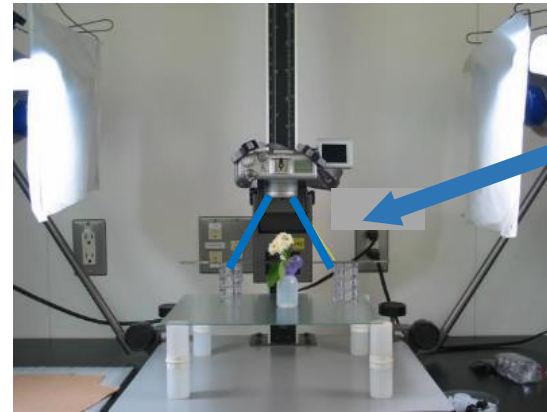
Distortion

When you approach an object by the wide angle side of a camera, the peripheral areas of the photo will become distorted.

The ruler appears bend



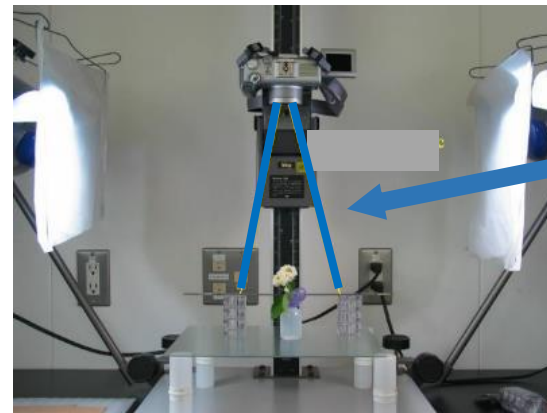
wide angle side



The ruler appears straight



telephoto side



Flash: not use



not used

changes into blue



used

Exposure



too dark

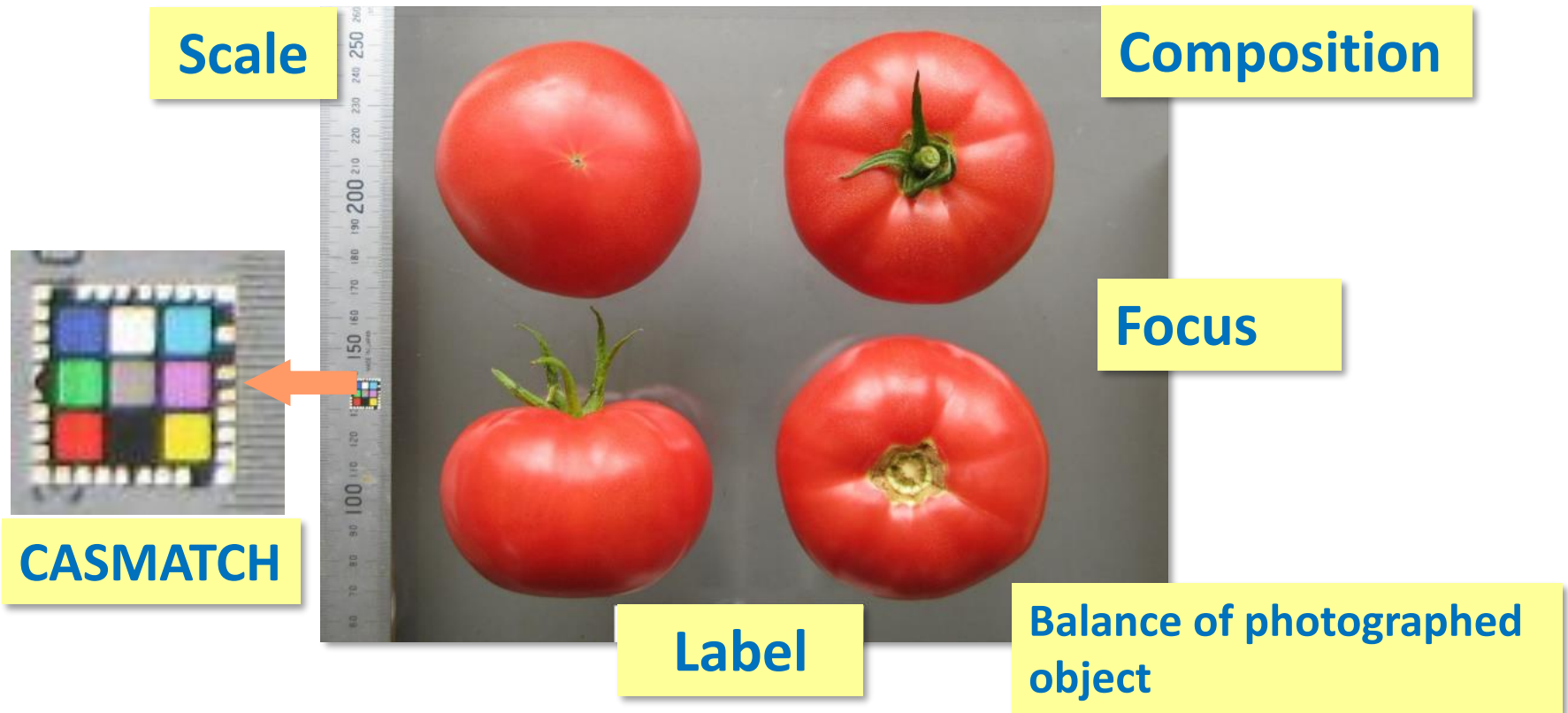


too bright

When the taken photo was too dark or too bright, you should adjust the Exposure.

Photographic objects

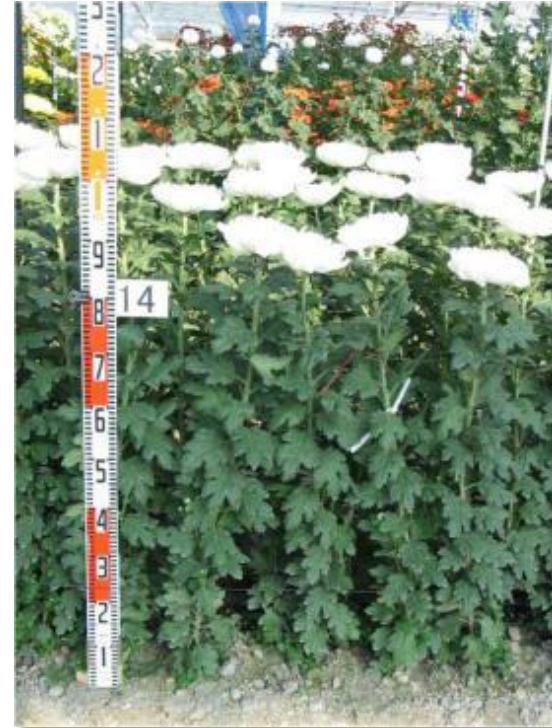
we should select **healthy samples** of the variety that exhibit **typical characteristics**.



Taking a photo outdoors



Direct sunlight



Bright shade

When taking photos outdoors, you should **avoid direct sunlight.**

3. Photographic techniques (practical guide)

Typical Compositions (maize)-1



Test Plot
Growing Conditions



Plant
Growth habit, Height, etc.



Leaf
Length, Shape color, etc.



Tassel

Typical Compositions (maize)-2



Ear



Cross section of ear



Grain

Other photos (maize)-3

If necessary, we take other photos.



Silk



Brace root

Comparison photos for distinctness

It would be very important to take comparison photos in order to **easily compare characteristics** between varieties.



Comparison photo: ear



Comparison photo: grain

Photos proving that there is **not clear distinctness**



you will need photos to explain that the characteristics of the candidate variety and similar variety are **not clear distinctness**.

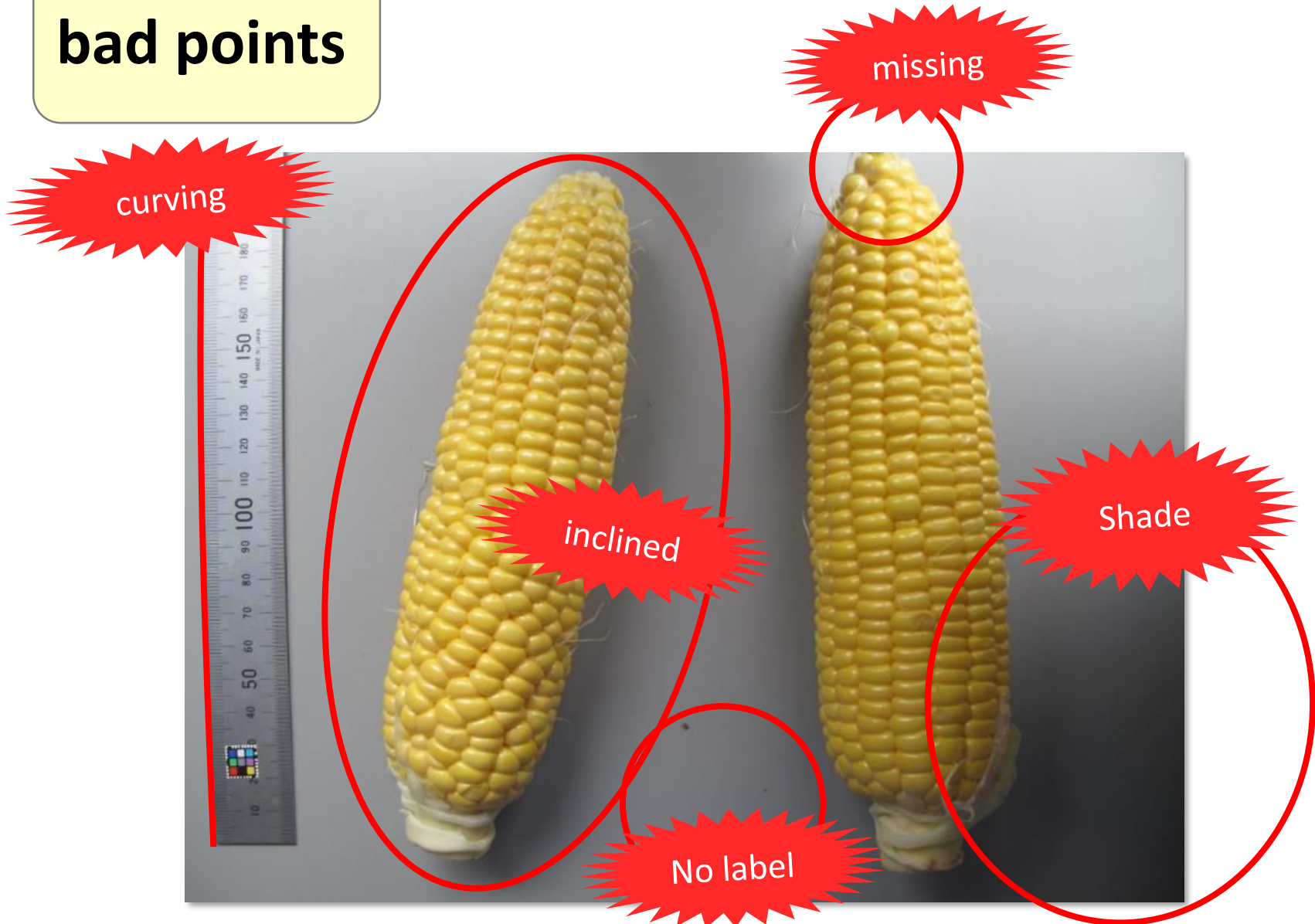
Important points in taking photos

- Characteristics expressed in the photos **must be matched** with the original objects or Variety Description.
- Sometimes discrepancies (length, color, etc.) occur due to **sampling errors** or **camera settings**.
- You should **check photos immediately** so that you can **take photos again**.

What are the bad points of this photo?



bad points



Thank you for your attention.



NCSS Headquarters