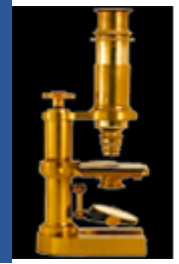
Computer Applications

ImageJ 12

Dr. Labeed Al – Saad , Basrah University, College of Agriculture

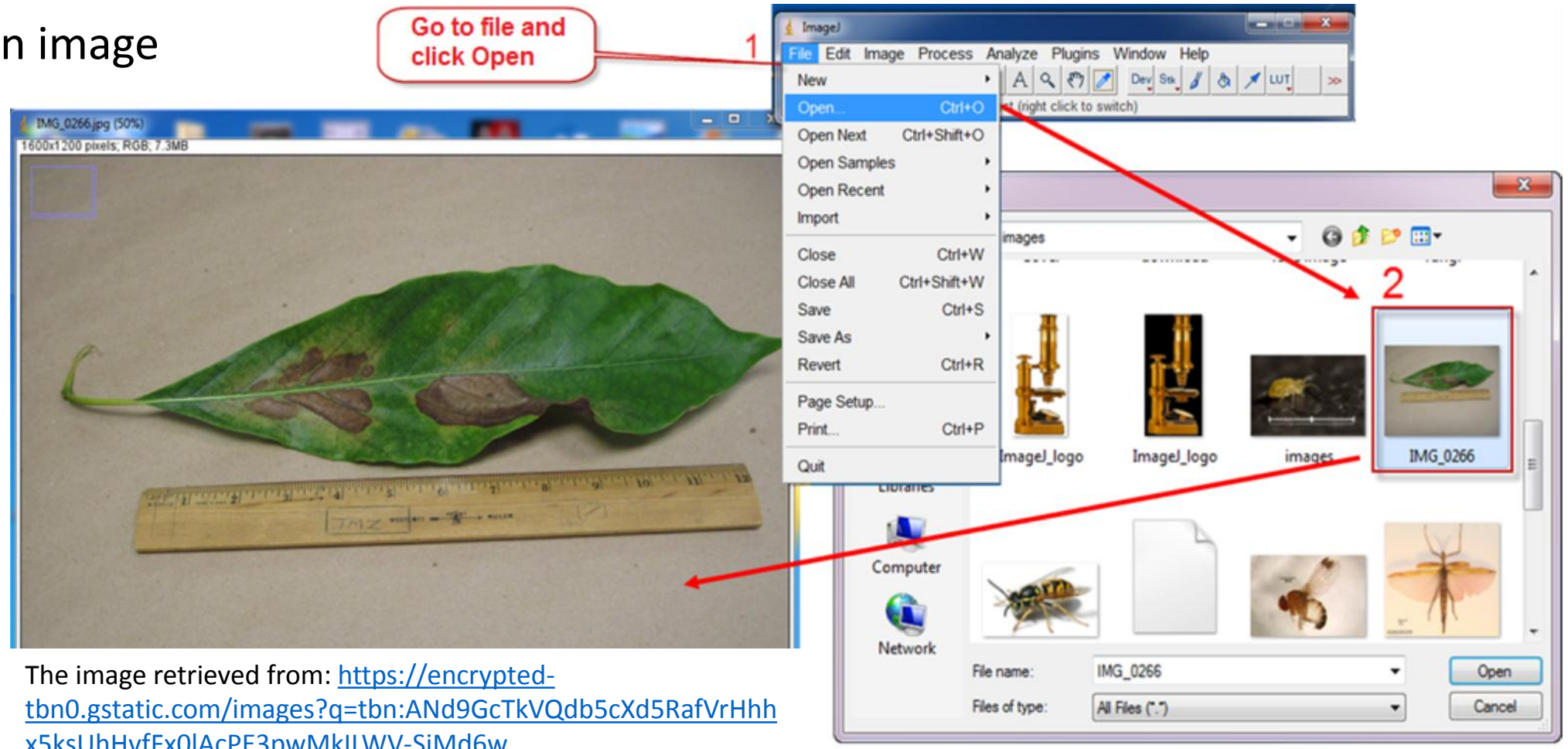


ImageJ

Image Processing & Analysis in Java

Estimating leaf spot percentage

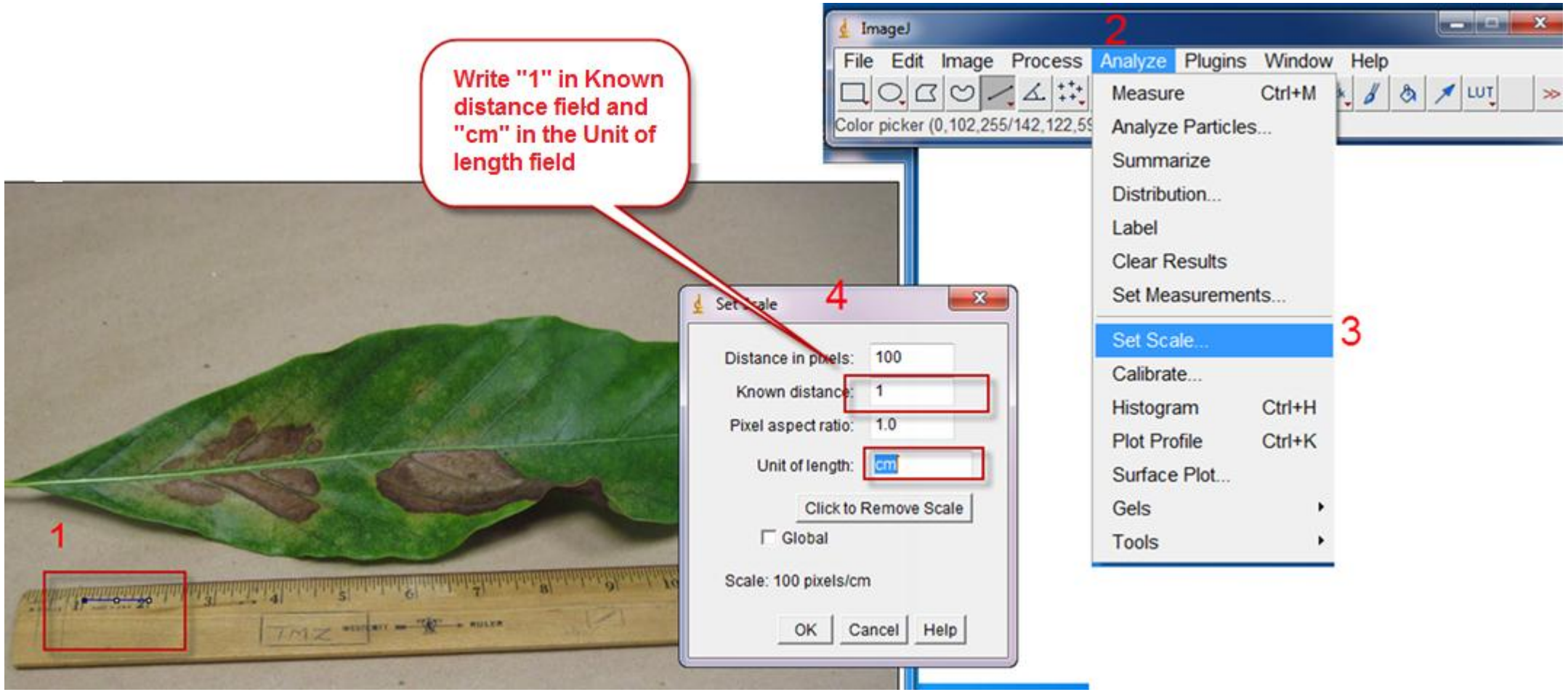
❖The first step is opening the image: Go to File >> Open >> Brows then double click to open image



The image retrieved from: https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcTkVQdb5cXd5RafVrHhhx5ksUhHvfFx0lAcPE3pwMkILWV-SjMd6w

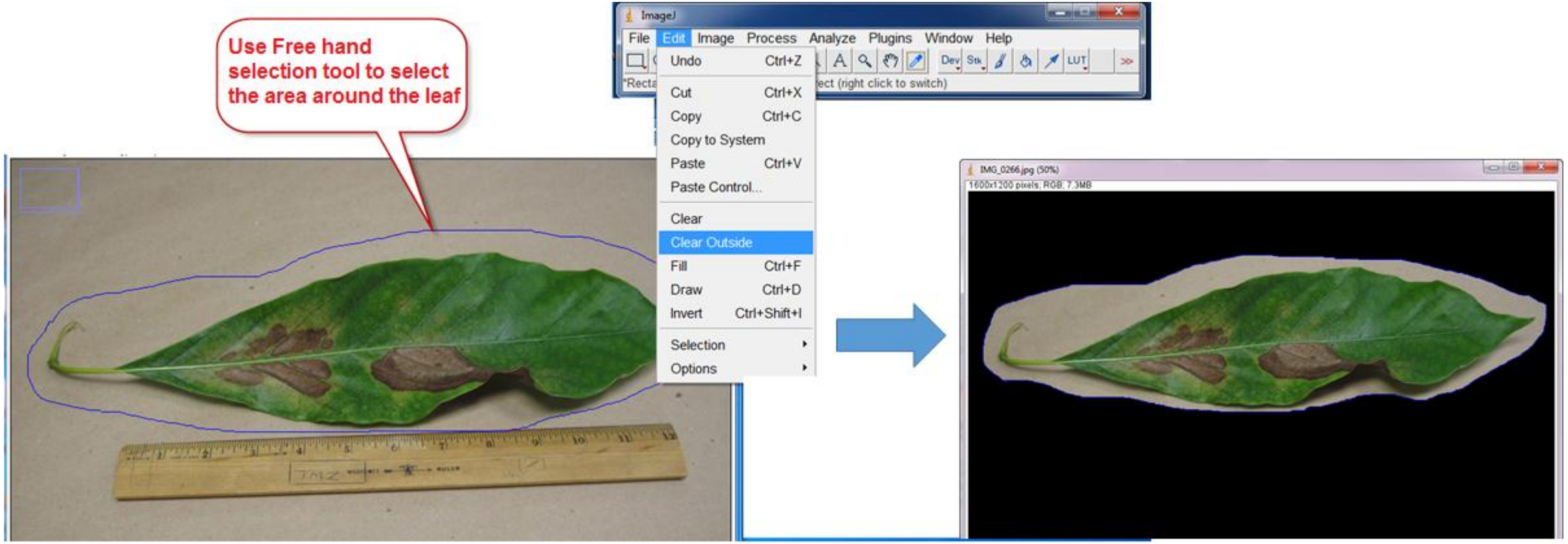
Estimating leaf spot percentage

❖Scale the measurements: Draw a line between 1-2 cm >> go to Analyze >> Set scale



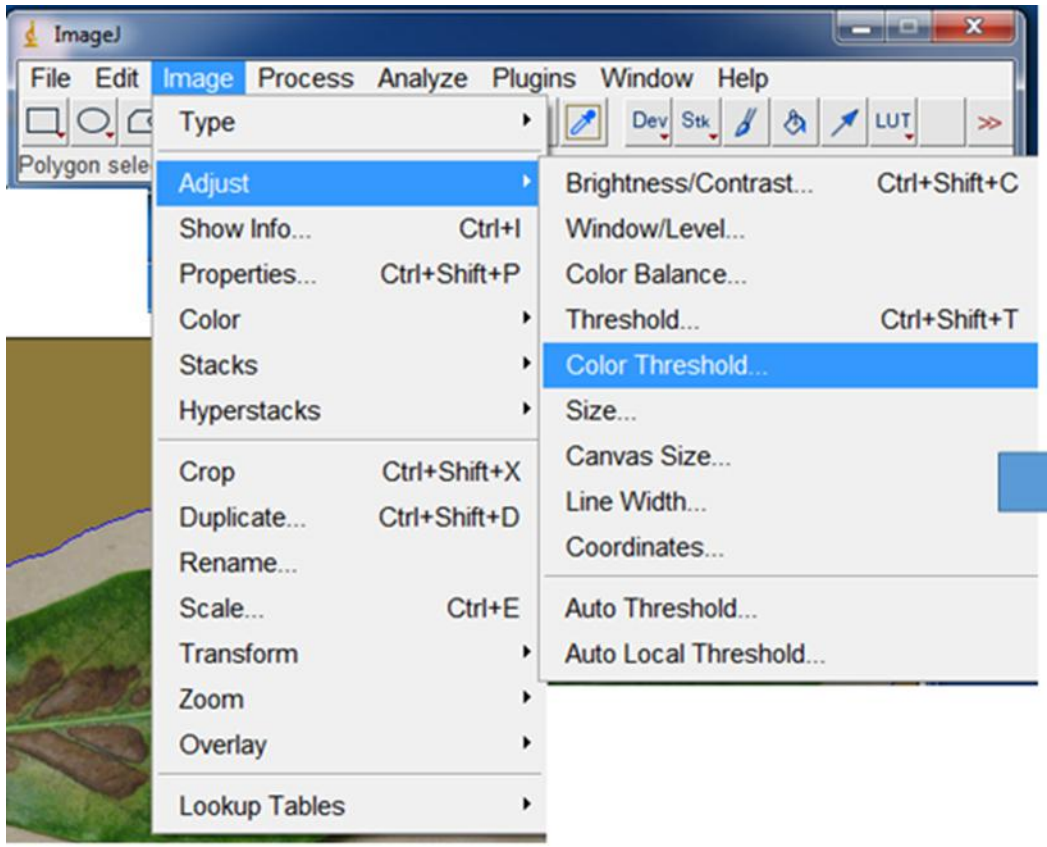
Estimating leaf spot percentage

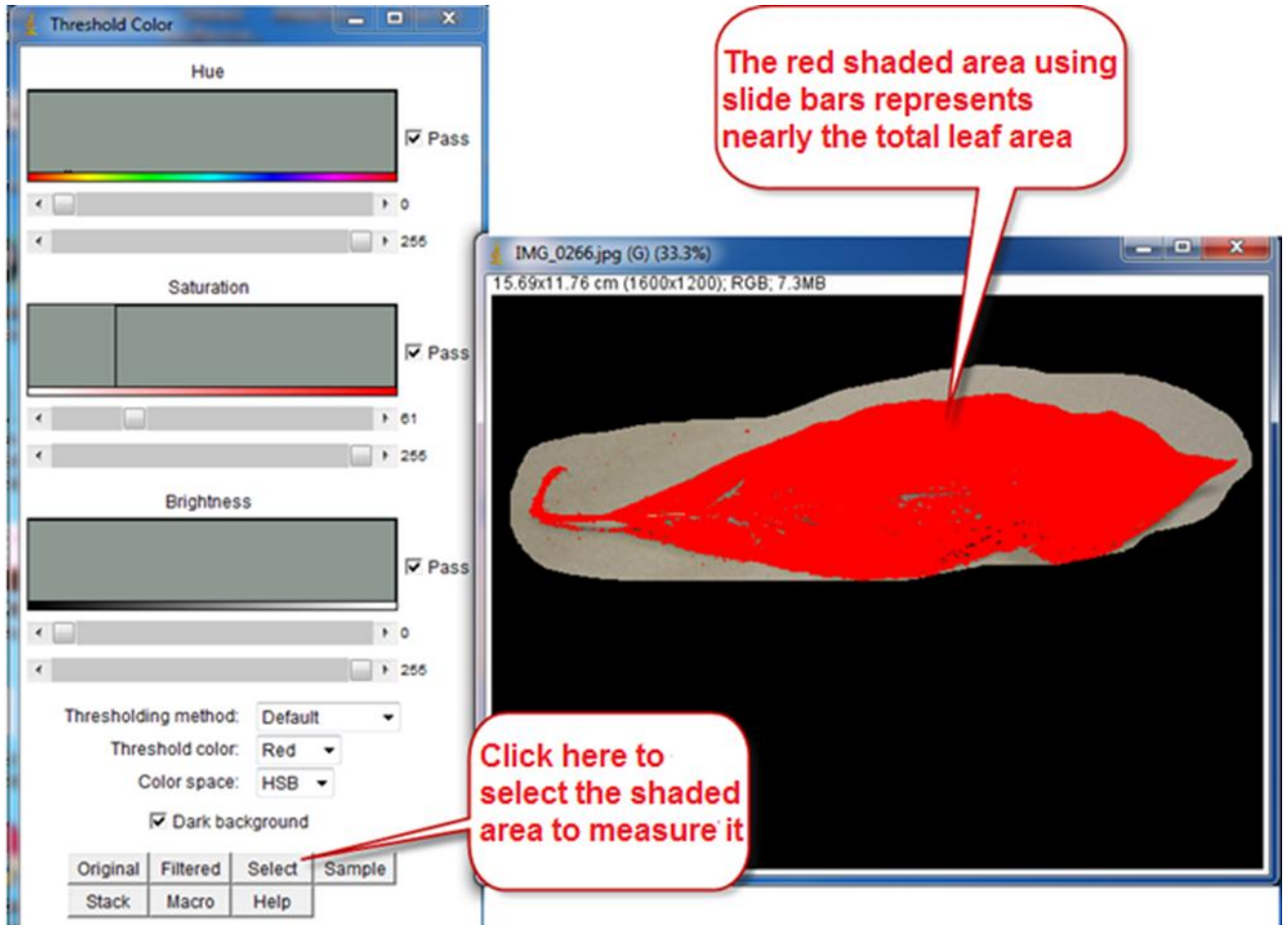
❖Select the leaf area by free selection tool >> go to Edit menu >> Clear out side



Estimating leaf spot percentage

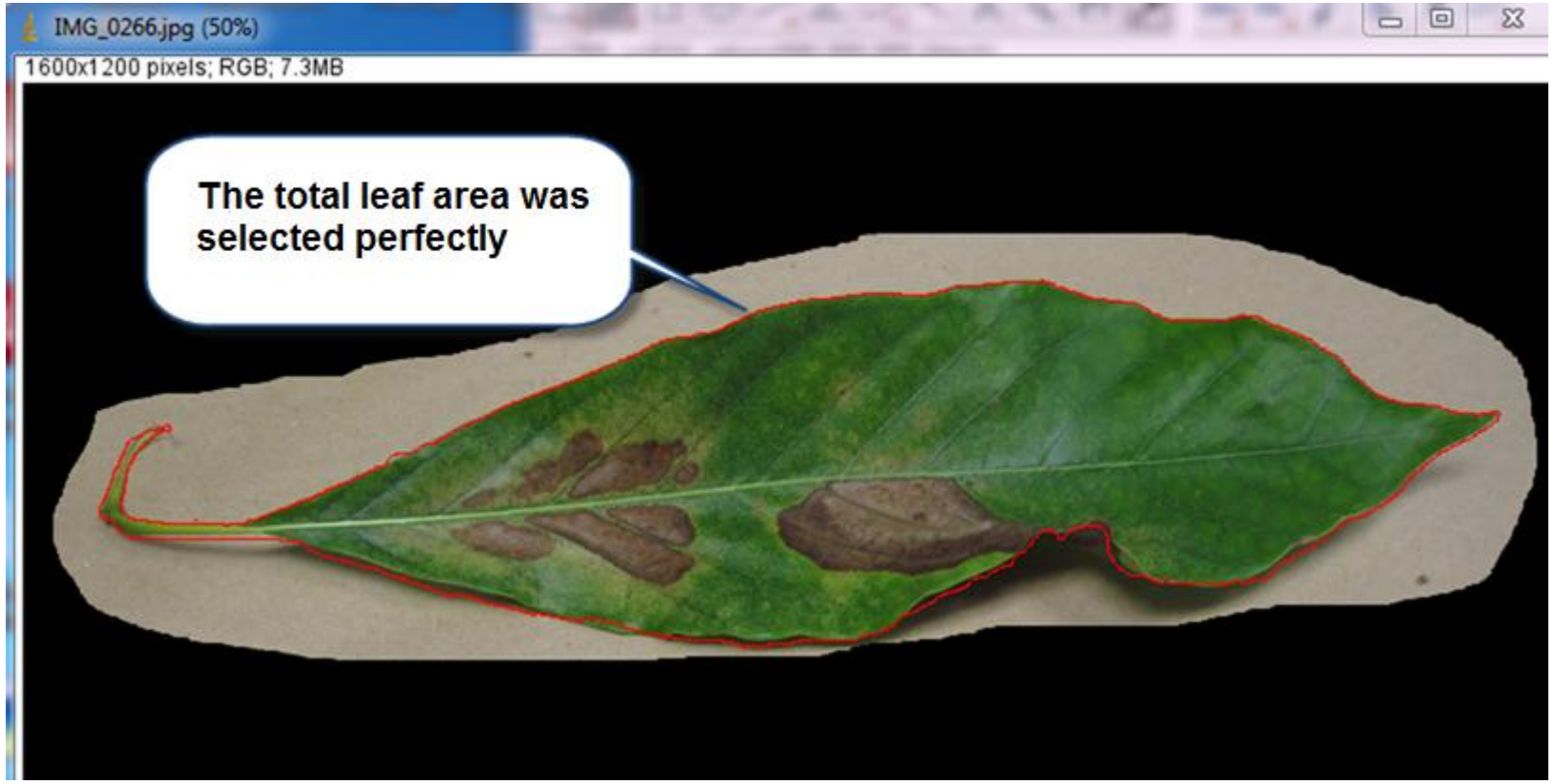
❖Thresholding image: Go to Image menu >> Adjust >> Color threshold





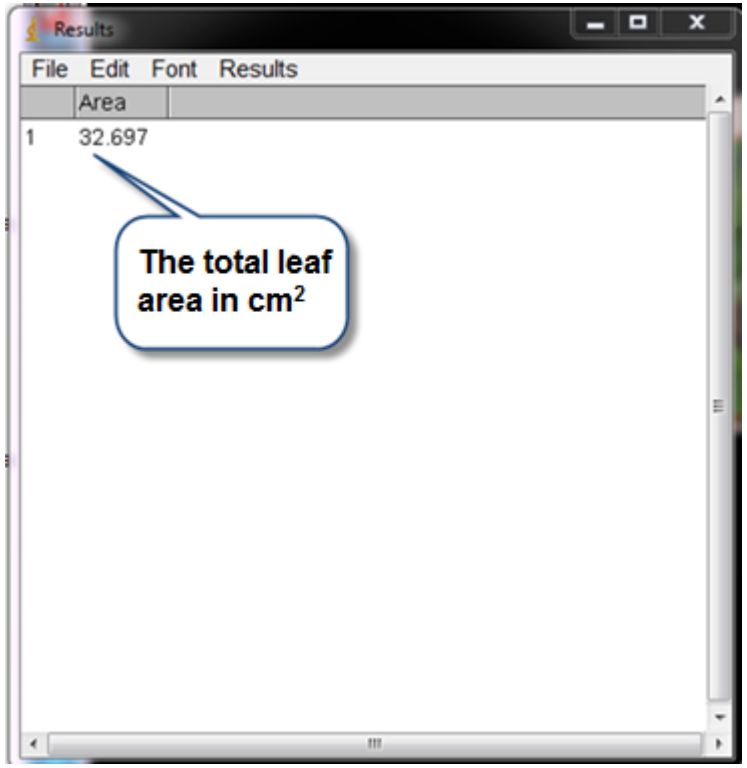
Estimating leaf spot percentage

❖ After press select button, the selected area may includes some noise (unwanted selections). We can clean that by Selection brush tool (right click on Oval tool). The selected area should be as below:



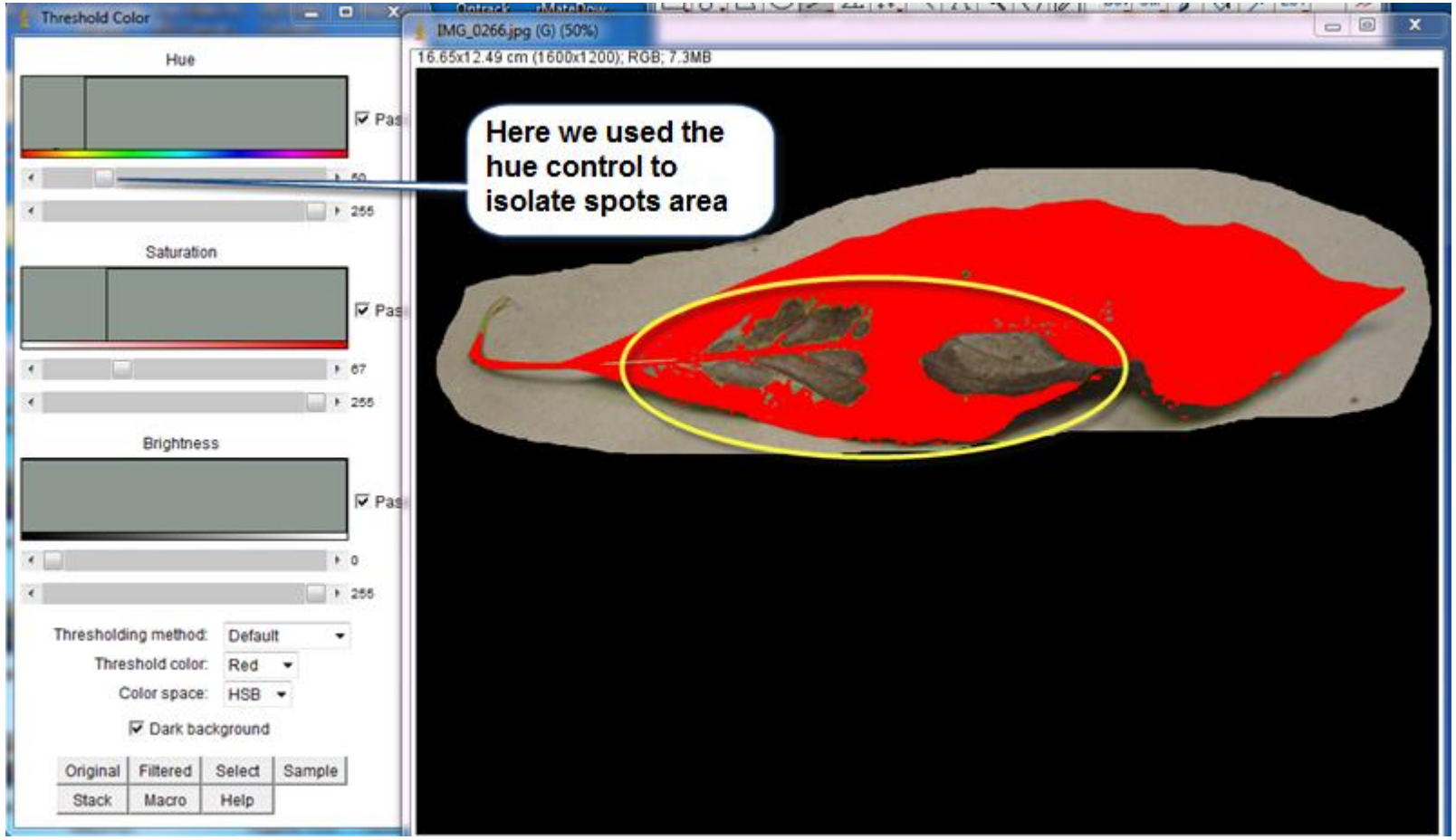
Estimating leaf spot percentage

❖Go to Analyze >> Measure or Ctrl + M to calculate the total leaf area



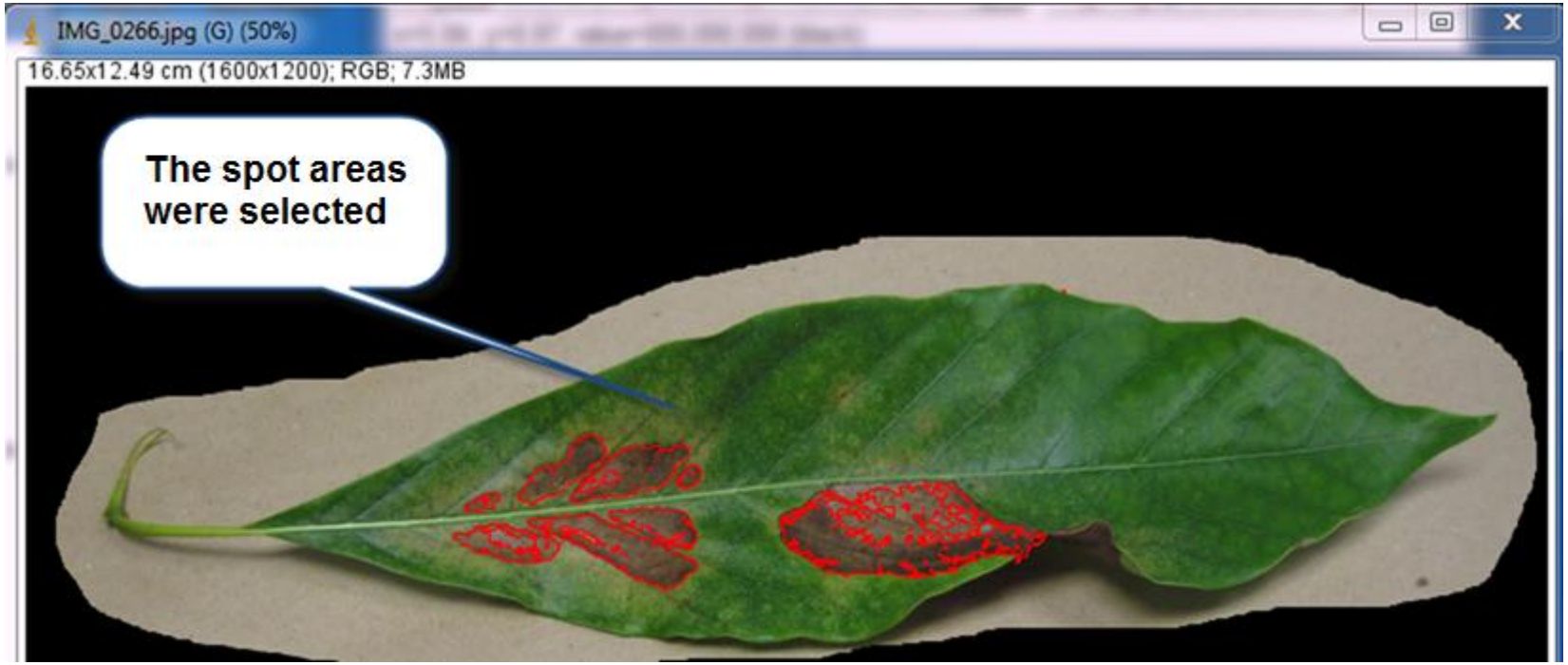
Estimating leaf spot percentage

❖In the same way (by color thresholding) we have to select the damaged areas.



Estimating leaf spot percentage

❖ To threshold the spots we have to invert selection by un-check Pass check box of the Hue control box.

Estimating leaf spot percentage

❖ After press select button, the selected area ma includes some noise (unwanted selections). We can clean that by Selection brush tool (right click on Oval tool). The selected area should be as below: