### 1- Crop image

→ crop image : x [660; 5300] et en y [750, 5500]

#### 2- Image Filter

→ use the morphologyEx method in opency

## 3- Detect features (Petri plate)

- → binary segmentation of image
- → Find petri plate in foreground mask
- → set serialization parameter of output petri mask

#### 4- Segmentation of image

# 5- Kept biggest connected component

- → labelled image regions.
- → to measure properties of labelled image regions.
- $\rightarrow$  to kept the area superior to a x define value

#### 6- Detect leaves and seed

- → labelled image regions.
- → to measure properties of labelled image regions.
- $\rightarrow$  to kept the area superior to a x define value
- → browse the pixels of the image on the region of interest
- → Kmeans

#### 7- Compute the graph corresponding to the RSA (cf Julien )

→ make "image-graph"

- → make polyline graph
- → shift graph node position by cropped box left corner