# Tutorial for using Grid_Ruler plugin

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# Download ImageJ or FIJI

- The website for downloading FIJI to all OS: https://imagej.net/software/fiji/downloads

- The website for downloading ImageJ to all OS: https://imagej.net/ij/download.html

# Download the plugin

- The link for downloading of plugin https://github.com/Stepikus/GridRuler/blob/main/Grid_Ruler.java

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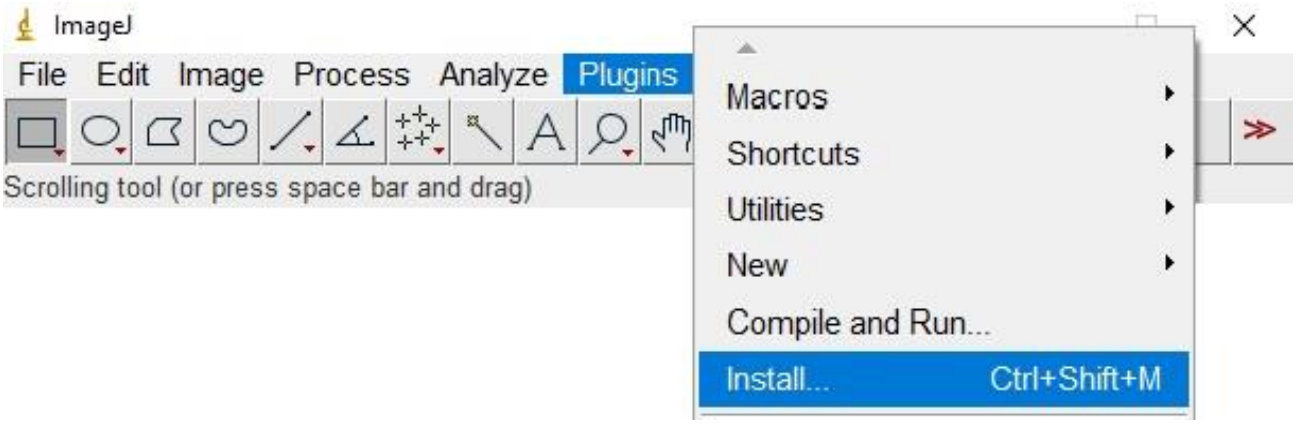
# Installing plugin on ImageJ/FIJI

When you want to install plugin, just click on Plugins and press Install and find your downloaded plugin.

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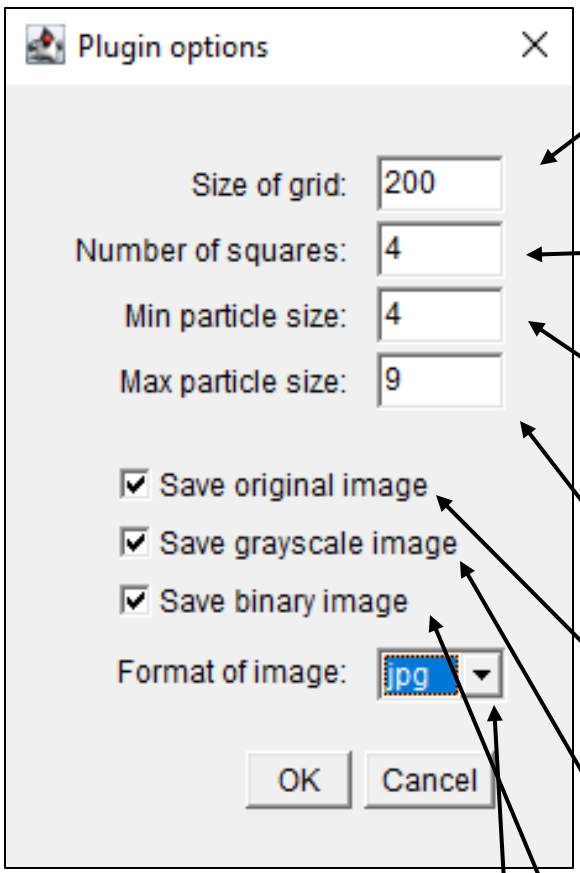
# Plugin options

After instalation the dialog window will be open  for specification of grid, searched particles and outpus




Size of grid: real size of grid

Number of square:number of square in one direction. For example if you want grid 4x4 squares write 4.

Min particle size: minimum size of detected particle

Max particle size: maximum size of detected particle

Save original image: Save  original image with real units

Save grayscale image: picture of the inner part of your grid will be saved in grayscale format with masked lines

Save binary image: cropped image in binary format will be saved in your folder

Format of image: formate of analysed images

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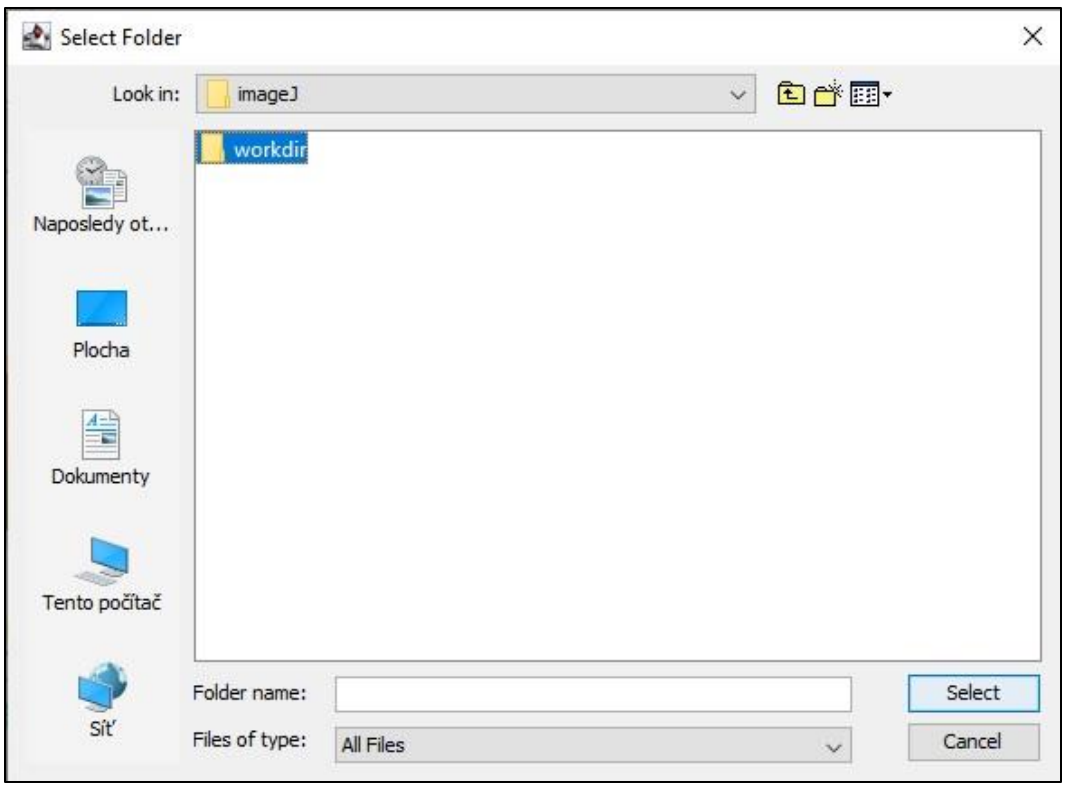
# Choose directory

- After that you have to Choose the directory of your images and click on select




# Outputs

- All output will be in the Result folder, which will be created in your images folder.

- **Tables-**output of your analysis will be two .csv files: Particles.csv with parametres of all particles of all images. Second is Count.csv with number of particles in individual images.

- **Images**-Another outputs can be original image, cropped picture of original image in grayscale and in binary form. All images are calibrated to real units according to grid.