

# Tutorial for using Grid\_Ruler plugin

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**Výzkumný ústav  
rostlinné výroby**

# 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>

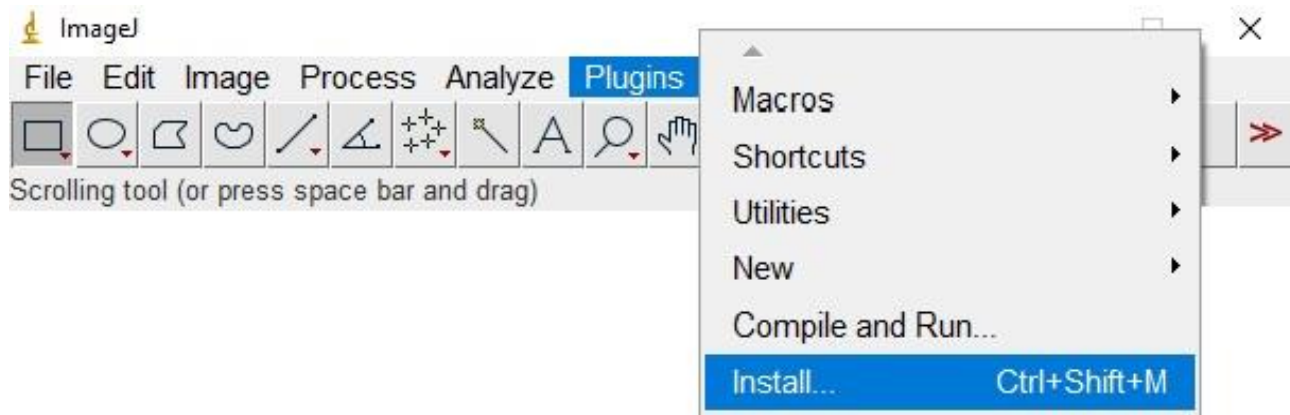
## Download the plugin

- The link for downloading of plugin  
[https://github.com/Stepikus/GridRuler/blob/main/Grid\\_Ruler.java](https://github.com/Stepikus/GridRuler/blob/main/Grid_Ruler.java)



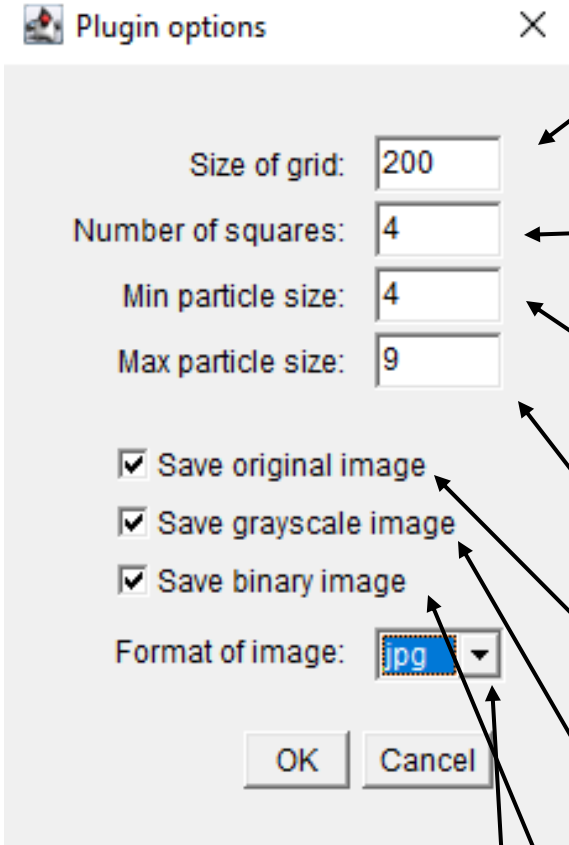
# Installing plugin on ImageJ/FIJI

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



# Plugin options

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



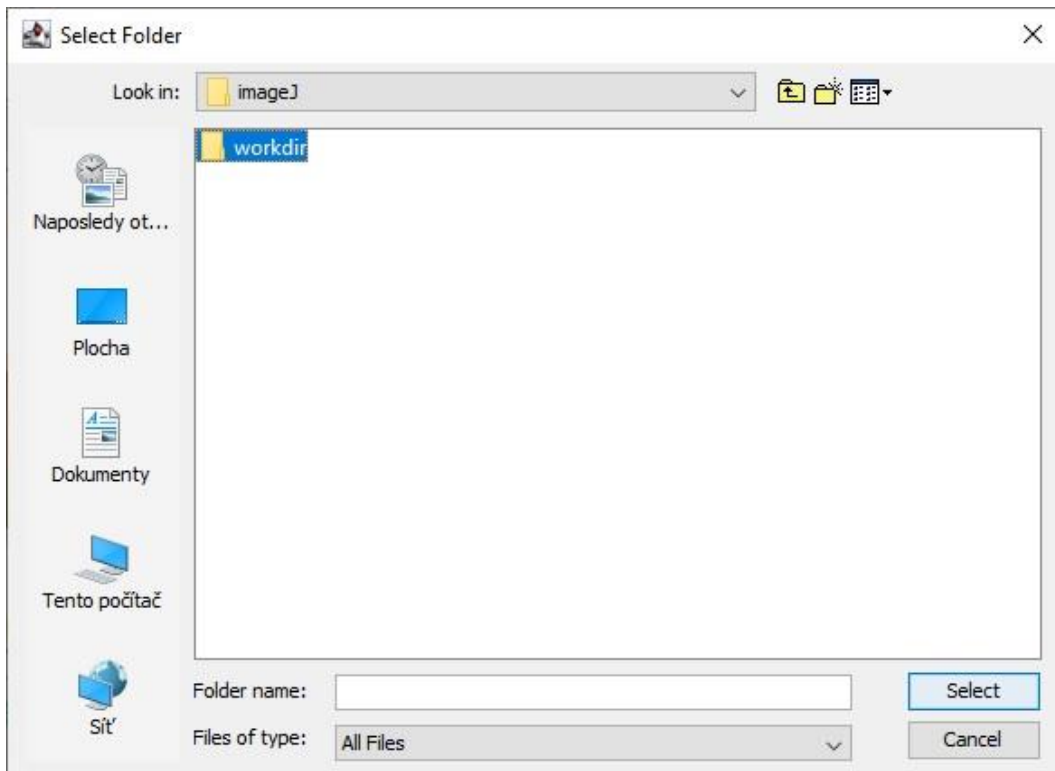
The screenshot shows the 'Plugin options' dialog window with the following settings and callouts:

- Size of grid:** 200. Callout: Size of grid: real size of grid
- Number of squares:** 4. Callout: Number of square:number of square in one direction. For example if you want grid 4x4 squares write 4.
- Min particle size:** 4. Callout: Min particle size: minimum size of detected particle
- Max particle size:** 9. Callout: Max particle size: maximum size of detected particle
- ☒ **Save original image**. Callout: Save original image: Save original image with real units
- ☒ **Save grayscale image**. Callout: Save grayscale image: picture of the inner part of your grid will be saved in grayscale format with masked lines
- ☒ **Save binary image**. Callout: Save binary image: cropped image in binary format will be saved in your folder
- Format of image:** pg. Callout: Format of image: formate of analysed images
- Buttons:** OK, Cancel



# 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.

