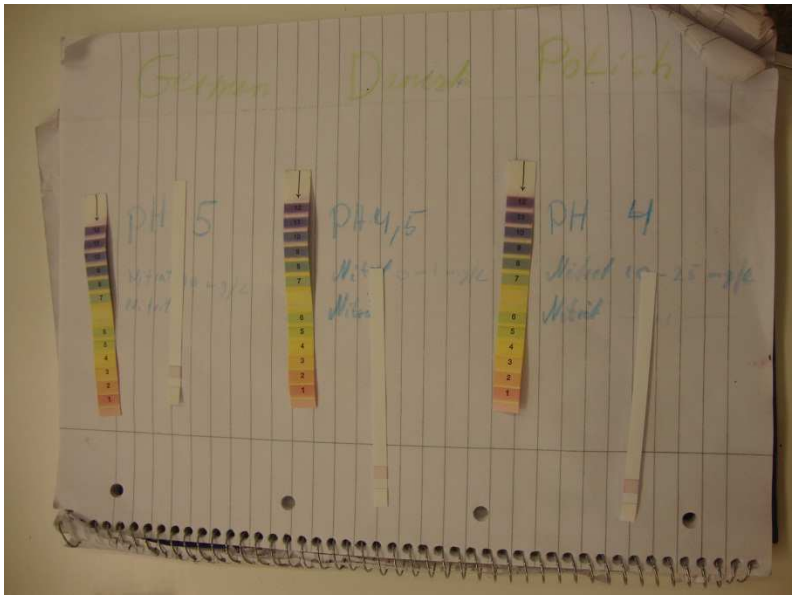
ADDITIONAL SUGGESTION
Once you have established your “Monster Rain” green roof prototype you can do many more experiments.

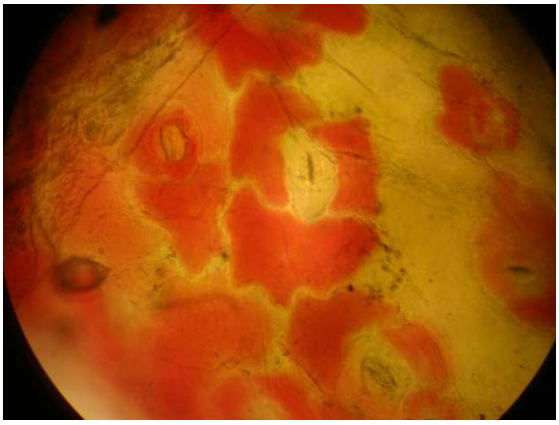
ADDITIONAL SUGGESTION ON WATER QUALITY
Measure the pH, nitrate, phosphorous etc. in rain water run-off from roof 1and 2.



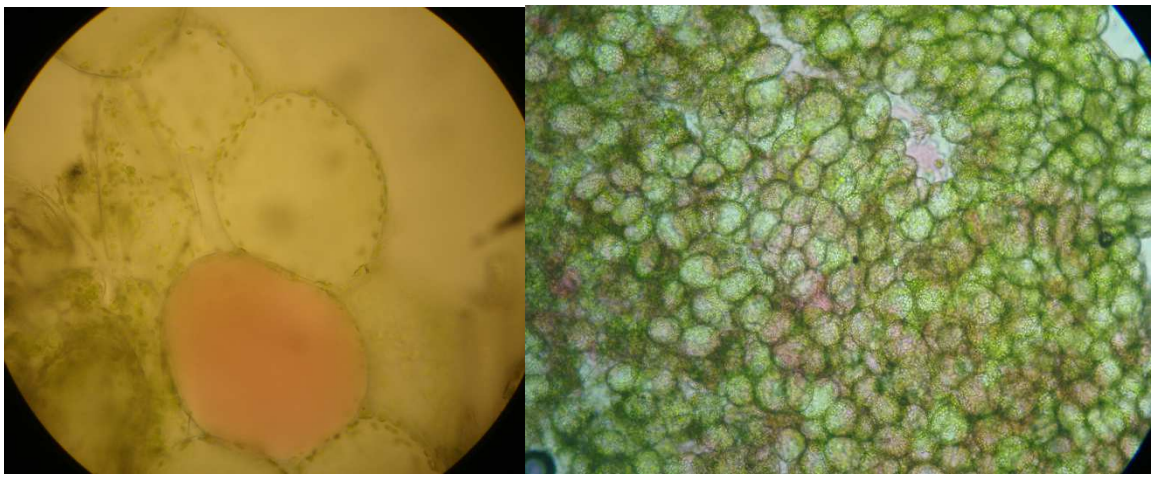
Is the pH and water quality the same? What do the results show?
Discuss how to present your results.

ADDTIONAL SUGGESTION ON PLANT CELLS AND TISSUE

Make sections of *Sedum* leaves in dry and wet conditions. Study the cell structure and measure the cell diameter using a light microscope.
Make a section of the epidermis and study the stomata and the colour and shape of cells. Count the number of open/closed stomata per mm^2



When studying cells from *Sedum* species in the microscope: Are the cell diameter the same from a plant in dry and in wet conditions? Does the number of open/closed stomata give important information as to what kind of biotope *Sedum* plants prefer?



ADDITIONAL SUGGESTION ON PLANT GROWTH AND INSOLATION

Do “green roofs” also have an insolation effect in cold winters, and a cooling effect in warm summers?

The following is best done on a bright sunny and warm day:
Take two plastic jars with each 10 - 25 liters of cold tap water.
Put a thermometer in each of the jars.
Place “a green roof” (mat) on one of the jars and leave the other one without cover.

Place the jars in a sunny spot for 1 hour or more. Measure the temperature in each of the jars before and after exposure – or every hour as a function of time. Make sure that the roof covering is only off for as long as it takes to read the thermometer.

Note the temperature and time. Present and discuss what you found out.