# Phenotyping of plant growth and form

PhD students will quantify growth and geometry of plant organs, using in vivo imaging methods (laser confocal microscopy and replica based in vivo SEM) and dedicated software (MorphoGraphX, Matlab scripts); the measurement results will be used to simulate growth with Growth Tensor methods; in parallel, mechanical properties of plant organs will be investigated using tensometer and DIC system.

**Who are we looking for (discipline, competences, motivations)**

PhD students interested in plant biology, in particular plant development, interactions with environment; experienced in quantitative analysis;  motivated to study biomechanical aspects of plant development and function.

**Number of participants**:

4-6

**Goal(s) of the workshop**

Expertise in quantification of plant growth and geometry, and mechanical properties of plant tissues.

**Knowledge, skills and competencies to be achieved**

Knowledge on mechanical aspects of plant development and function; skills in quantitatification of plant organ growth and geometry, and in measurements of mechanical properties; competence to team work in planning and performing experiments.

**Teachers**

Prof. Dorota Kwiatkowska, Dr. Agata Burian, Dr. Marcin Lipowczan, Jerzy Karczewski, MSc (members of biophysics and morphogenesis of plants research team)