

## How to build a plant ?

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### Course organisation:

This course promotes an active and interactive pedagogical approach including hands-on experiments .

- A reversed pedagogy approach where students will have to revise before the course the basic notions of plant development thanks to a bibliography and documentation that will be provided to them.
- A practical laboratory approach where students will have all the equipment available to set up their own experiments in order to characterise developmental mutants.

### Targeted learning objectives:

The students will have to choose the most relevant workshops for the characterisation of a mutant that they have been given, on the basis of the information that the teaching team will provide them.

At the end of these workshops, they will have to make a presentation to the whole group.

The teaching team will be available to provide technical support to the students during the various workshops. The pedagogical objective of these workshops is to offer the students a scientific approach similar to that used in our laboratories, with the analysis of a genotype without preconceived ideas, the formulation of hypotheses, the implementation of various analysis methods, the synthesis and presentation of results, including, if possible, a statistical analysis, and the oral presentation of this work.

#### **At the end of the course, students will be able to:**

- To understand in a theoretical and practical way the development of plants and their adaptations
- To be able to formulate hypotheses and to set up an experimental approach to answer them
- To gain autonomy in learning recent methods of plant cellular and molecular analysis