

Multiscale plant modelling and Phenotyping in OpenAlea



Dr. Christophe PRADAL

Senior Researcher at CIRAD and INRIA

Plant phenotyping has entered a new era with the introduction of robotic phenotyping platforms, new generations of sensors and digital technologies. The development of biological models from tissue to stand scales is progressing rapidly due to the availability of these new phenotyping data. One of the major challenges in biology and agronomy is the integration between these different scales. Actual challenges are to couple data science, next generation of functional structural and crop models, and new digital technologies needed for these developments.

I will present the role of plant modelling in plant science, different applications in plant phenotyping and plant modelling, and the collaborative effort to share model and methods between different teams through the OpenAlea software platform.