

Developing Open Source Image Analysis Software in Plant Sciences

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Abstract

At the Centre for Plant Integrative Biology, we have developed a number of software tools for use by biologists. Some of our tools have been developed in ImageJ and Fiji, as both macros and plugins, while others have been written from the ground up in languages such as C++ and C#. Here, we present an overview of our image analysis tools, which include automated plant root measuring, co-localization, confocal cell measuring, and 3D segmentation. Additionally we will discuss the benefits and challenges we have experienced developing this software both with ImageJ and using other languages.

Keywords

Image analysis, plant sciences, ImageJ

