Public Abstract
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A radioactive tracer (radiotracer) is generally defined as a radioactive isotope that is used as a tracer, which can be followed or tracked within a system of interest. The use of radiotracers involves the substitution of a radioactive isotope for one of the naturally occurring isotopes of a particular element. Radiotracers have a wide range of application due to two unique features: a high level of detection sensitivity, and an ability to integrate into living systems. These features make the use of radiotracers particularly useful for studying the dynamic processes that comprise metabolic activity. This work focuses on the use of radiotracers to identify and follow specific biological pathways to facilitate our understanding of plant biology, such as heavy metal accumulation, carbon metabolism and its relationship to Fe status in plants. All of the plants used in this work are Arabidopsis thaliana plants (wild type, col-0 and its different mutants).