

PLANT PROTEASES

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Frank Van Breusegem

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PLANT PROTEASES

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Plant proteases are involved in most aspects of plant physiology and development, playing key roles in the generation of signaling molecules and as regulators of essential cellular processes such as cell division and metabolism. They take part in important pathways like protein turnover by the degradation of misfolded proteins and the ubiquitin-proteasome pathway, and they are responsible for post-translational modifications of proteins by proteolysis at highly specific sites. Proteases are also implicated in a great variety of environmentally controlled processes, including mobilization of storage proteins during seed germination, development of seedlings, senescence, programmed cell death and defense mechanisms against pests and pathogens.

However, in spite of their importance, little is known about the functions and mode of actions of specific plant proteases. This Research Topic collects contributions covering diverse aspects of plant proteases research.

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