Record Nr. UNINA9910404085103321 Autore Gomi Kenji **Titolo** Jasmonic Acid Pathway in Plants MDPI - Multidisciplinary Digital Publishing Institute, 2020 Pubbl/distr/stampa **ISBN** 3-03928-489-4 Descrizione fisica 1 online resource (346 p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia The plant hormone jasmonic acid (JA) and its derivative, an amino acid Sommario/riassunto conjugate of JA (jasmonoyl isoleucine, JA-IIe), are signaling compounds involved in the regulation of defense and development in plants. The number of articles studying on JA has dramatically increased since the 1990s. JA is recognized as a stress hormone that regulates the plant response to biotic stresses such as herbivore and pathogen attacks, as well as abiotic stresses such as wounding and ultraviolet radiation. Recent studies have remarkably progressed the understanding of the importance of JA in the life cycle of plants. JA is directly involved in many physiological processes, including stamen growth, senescence, and root growth. JA regulates production of various metabolites such as phytoalexins and terpenoids. Many regulatory proteins involved in JA signaling have been identified by screening for Arabidopsis mutants. However, much more remains to be learned about JA signaling in other plant species. This Special Issue, "Jasmonic Acid Pathway in Plants", contains 5 review and 15 research articles published by field experts. These articles will help with understanding the crucial roles of JA in its

plants.

response to the several environmental stresses and development in