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
of

Agriculture and Forestry

## Hormone Signaling Pathways in Plants: The Role of Jasmonic Acid in Plant Cell Signaling

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 [Keywords](#)  
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**Abstract:** Plant growth and metabolism are affected by various biotic and abiotic stimuli including microorganisms and insects attack as well as light and environmental stresses. Such a diverse plant response requires a communication system that uses a group of chemical messengers called hormones. Hormones promote, inhibit, or qualitatively modify plant growth and development. This complex process requires a signal transduction that defines a specific information pathway within a cell that translates an intra- or extracellular signal into a specific cellular response. The characterization of mutants in the hormone response pathway provides not only an excellent opportunity to understand hormone action in plant physiology and development, but also helps to dissect the molecular genetics of hormone signaling pathways and to isolate the corresponding genes. This paper will introduce plant hormone signaling and mutants involved in signaling pathways in general, and will review recent progress in the molecular genetics of jasmonic acid signaling.

**Key Words:** Plant hormones, jasmonate signaling, elicitors, hormone receptors, hormone mutants

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