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[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

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[\[PDF \(174K\)\]](#) [\[References\]](#)

### Plant Ion Channels as Potential Targets of Agro-Chemicals

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#### Abstract:

In the past 20 years, plant ion channels have been studied electrophysiologically, genetically and biochemically. However, much less study has been done on plant ion channels than animal and insect ion channels, especially in the field of pharmacology. Plant ion channels can serve as targets of agro-chemicals to control growth, stress tolerance and disease resistance, since they mediate physiological processes, like animal and insect ion channels. In this article, we review the current status of research on plant ion channels, in order to present guiding principles for designing new plant growth regulators and disease controlling agents. © Pesticide Science Society of Japan

#### Keywords:

agro-chemical, inhibitor, ion channel, plasma membrane

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