The Chemical Biology of Plant Biostimulants

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Introduces readers to the chemical biology of plant biostimulants

This book brings together different aspects of biostimulants, providing an overview of the variety of materials exploited as biostimulants, their biological activity, and agricultural applications. As different groups of biostimulants display different bioactivity and specificity, advances in biostimulant research is illustrated by different examples of biostimulants, such as humic substance, seaweed extracts, and substances with hormone-like activities. The book also reports on methods used to screen for new biostimulant compounds by exploring natural sources.

Combining the expertise of internationally-renowned scientists and entrepreneurs in the area of biostimulants and biofertilisers, *The Chemical Biology of Plant Biostimulants* offers in-depth chapters that look at: agricultural functions and action mechanisms of plant biostimulants (PBs); plant biostimulants from seaweed; seaweed carbohydrates; and the possible role for electron shuttling capacity in elicitation of PB activity of humic substances on plant growth enhancement. The subject of auxins is covered next, followed by a chapter on plant biostimulants in vermicomposts. Other topics include: exploring natural resources for biostimulants; the impact of biostimulants on whole-plant and cellular levels; the impact of PBs on molecular level; and the use of plant metabolites to mitigate stress effects in crops.

- Provides an insightful introduction to the subject of biostimulants
- Discusses biostimulant modes of action
- Covers microbial biostimulatory activities and biostimulant application strategies
- Offers unique and varied perspectives on the subject by a team of international contributors
- Features summaries of publications on biostimulants and biostimulant activity

The Chemical Biology of Plant Biostimulants will appeal to a wide range of readers, including scientists and agricultural practitioners looking for more knowledge about the development and application of biostimulants.

For more information on the Wiley Series in Renewable Resources, visit **www.wiley.com/go/rrs**

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