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Advances in Plant Auxin Biology

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Message from the Guest Editors

Auxin regulates plant growth and development in several ways, such as through cell differentiation, division, elongation, polarization and stress response. The biosynthesis, conjugation, degradation, transport and signaling of auxin in the regulation of plant growth and development and in response to environmental stress has been a hot topic of research in botany. This Special Issue will focus on, but is not limited to, the following topics:

1) The identification and functional validation of key genes for auxin biosynthesis, conjugation, degradation, transport and signaling in different species;

2) Transcriptional regulation, post-transcriptional regulation and protein modification of key genes for auxin biosynthesis, conjugation, degradation, transport and signaling;

3) The interaction of different small molecules and other plant hormones with auxins;

4) The mechanisms by which different environmental stresses (biotic and abiotic) regulate auxin homeostasis, especially local auxin homeostasis;

5) Possible new inhibitors of auxin biosynthesis, conjugation, degradation, transport and signaling pathways, or studies on the mechanisms of known auxin inhibitors.







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Message from the Editor-in-Chief

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