Special Issue

Hypoxia Sensing, Signaling and Parsing in Plants

Message from the Guest Editors

Soil flooding depletes the available oxygen (hypoxia), leading to inefficient anaerobic metabolism and energy starvation. Wetland plants have evolved the hormones ethylene and gibberellin to achieve submergence tolerance or escape in wetter world. Plants can rapidly detect submergence through passive ethylene entrapment and use this signal to pre-adapt to impending hypoxia. In addition, several Ca2+- and K+-permeable channels from KCO, AKT, and TPC families are speculated to operate in low-oxygen sensing in *Arabidopsis*. However, understanding how plants sense flooding, the signaling pathway, metabolically adjust to it and ultimately survive in hypoxic conditions still requires a great deal of exploration. This Special Issue of *Plants* will focus on diversified plant sensing and signaling responses under low-oxygen stress and will explore the diversity of plants to develop new knowledge of tolerance mechanisms.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

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