## **Special Issue**

## Plant Perception, Behavior, and Environmental Response Mechanisms

### Message from the Guest Editors

Plants exhibit remarkable dynamism, engaging in continuous perception, signaling, and adaptive behavior. Far from being passive, plants integrate multiple sources of information to regulate their growth, development, and interaction with their surroundings. Advances in plant science have revealed a broad spectrum of intra- and inter-communication modalities. These processes are observed across a range of spatial and temporal scales, from the molecular to the behavioral level. This underscores the notion that plants function as active organisms in intricate networks of interaction. This Special Issue seeks to highlight the multifaceted nature of plant communication and behavior, ranging from intracellular pathways to ecosystem dynamics. We welcome contributions encompassing a variety of perspectives, including biological, chemical, physiological, behavioral, and theoretical approaches, that investigate how plants detect and process environmental stimuli, establish interactions with other organisms, and adapt through structural, physiological, and behavioral strategies, thereby illuminating the integrative systems that sustain plant life.

#### **Guest Editors**

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## Deadline for manuscript submissions

15 July 2026



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