

Special Issue

Light and Plant Response: Adaptation to Extremes, Phenotypic Plasticity and Plant Competition

Message from the Guest Editors

Light is one of the most important environmental factors that influence physiological processes, such as photosynthesis, photomorphogenesis, photoperiodism, phototropism and secondary metabolism (Gelderen et al., 2018). Plants have acquired a sophisticated network of photoreceptors that enable them to perceive and respond to environmental change. This is of particular importance under dense planting conditions, such as in most agricultural fields, where aboveground competition for light occurs. Competition for light among plants often induces asymmetric competition, which can be successfully corrected by phenotypic plasticity ability. The effect of light intensity on plants has been studied experimentally for over 100 years now. However, there are still substantial gaps in the knowledge concerning the effects of daily light integral to plant reproduction, respiration, chemical composition, belowground organ adaptations, and plant interrelations. We welcome original research papers from leaf phenology to the ecosystem scale, based on experimental, theoretical, and modeling approaches, as well as review articles.

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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.

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