Special Issue

Carotenoid Biosynthesis, Regulation, Storage and Degradation in Plants

Message from the Guest Editor

Epigenetic and metabolic feedback regulation of the carotenoid pathway can alter carotenoid homeostasis, signifying essential functions for carotenoids in mediating development and/or responding to changes in the environment. Carotenoids can be degraded by enzymatic and non-enzymatic oxidative cleavage, generating phytohormones as well as mobile apocarotenoid signalling metabolites. Emerging trends in carotenoid biology are unearthing new apocarotenoid signals, their pathways for synthesis and their mechanisms of action. Some of these aprocarotenoids have recently emerged as bioactive molecules to treat human cancer (dihydroactinidiolide); induce plant herbivore resistance (loliolide); and control root development (anchorene), parasitic weed germination (strigolactone), growth (zaxinone) as well as stress acclimation (α-cyclocitral) in plants. This Special Issue of *Plants* invites submissions that address the above issues and describe new aspects related to carotenoid biology in plants.

Guest Editor

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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.

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