Special Issue

Inflorescence Architecture and Development in Plants, 2nd Edition

Message from the Guest Editor

Flowering plants show significant variations in the structure of their inflorescences, from simple to complex forms. The forms and structures of inflorescences are the most important traits in the characterization of species, their taxonomy and the evolution of the different groups of plants. In turn, they have a direct impact on the regulation of fruit and seed numbers, affecting crop yields. Consequently, inflorescence is one of the major organs in determining grain yield. Mediated by endogenous and exogenous signals, the vegetative shoot apical meristem of any plant stops the production of leaves, transforms into the inflorescence meristem (IM) and begins inflorescence development. Inflorescence architecture depends on the activity of the IM, which can directly generate floral meristems (FMs)—which will thus form a defined number of flowers on the main axis—or branch meristems (BMs) —which can generate a determined number of lateral branches. This sequence can be repeated one to several times. Finally, both the IMs and the BMs can generate a terminal flower or end sterile.

Guest Editor

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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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