

## 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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### Deadline for manuscript submissions

closed (25 May 2025)



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### Message from the Editor-in-Chief

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### Editor-in-Chief

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