

## Colloquium Papers and Authors

Presiding: Douglas D. Archbold

### Understanding Floral Induction and Morphogenesis: An Introduction to the Colloquium

Douglas D. Archbold

### Molecular Mechanism of Shoot Determinacy and Flowering in Arabidopsis

Z.R. Sung, L.-J. Chen, Y.-H. Moon, and N. Yoshida

### Diversification of Floral Homeotic Gene Function

Vivian F. Irish

### Management of Flowering in Three Tropical and Subtropical Fruit Tree Species

Thomas L. Davenport

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## Understanding Floral Induction and Morphogenesis: An Introduction to the Colloquium

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Few plant developmental processes are as critical to horticulture as flowering. Flowering is essential to the production of the vast majority of edible food crops and to the aesthetic beauty of our landscape and floricultural crops. Yet, despite its central role, the physiological basis of floral induction and morphogenesis has remained a mystery even though our ability to manipulate the timing of the process in many species has improved. As an example, florigen was proposed many years ago as a floral-inducing plant hormone. Much evidence

has accumulated inferring its existence, but it has yet to be clearly isolated and confirmed. With the advent of molecular genetic tools and transgenic and mutant plants, many aspects of the flowering process are being elucidated. The following papers from this colloquium provide reviews on the state of our understanding of floral induction and morphogenesis in model systems, and how horticultural manipulation has achieved a measure of success in determining the timing of the process in some horticultural crops.