

Meyerowitz E.M., C.R. Somerville (ed.): *Arabidopsis*. - Cold Spring Harbor Laboratory Press, Cold Spring Harbor 1994. 1300 pp.

*Arabidopsis thaliana* (Brassicaceae or Cruciferae) is a popular model organism for investigating a broad range of topics in plant biology. The haploid nuclear genome (about 200 Mb) of *A. thaliana* is unusually small for a flowering plant and has little dispersed repetitive DNA. This publication presents a synthesis of currently available information on the biology and genetics of *Arabidopsis* written by authors working in different areas of *Arabidopsis* research. As the editors write in the Introduction, we are now in a "golden age" of discovery in plant molecular biology and this has been greatly facilitated by the widespread adoption of *Arabidopsis* as a model species. The forty chapters are divided in 5 sections. The first section Genetics focuses on systematics, nuclear, chloroplast and mitochondrial genomes, molecular cytogenetics, general and quantitative genetics, mutagenesis, and on tissue culture and transformation. Sections Development and Growth cover development, dormancy and germination of seeds, development of roots, apical meristems, flowers and leaves, the period from pollination to fertilisation, and the effects of plant hormones on various stages of *Arabidopsis* development. The section Biotic and Abiotic stress deals with the interaction between *Arabidopsis* viruses, microbes and nematodes and with the use of *Arabidopsis* for studying mechanisms of plant cold tolerance. The concluding section Biochemistry and Cell Biology presents among others reviews on the molecular genetics of amino acid, nucleotide, and vitamin biosynthesis, on photosynthesis, secondary metabolism, structure, synthesis and function of the plant cell wall and on the plant cytoskeleton. The readers may find in the Appendices two interesting and useful chapters: The Internet and electronic *Arabidopsis* information resources, and a List of *Arabidopsis* genes with their location.

The publication is an excellent source of references for *Arabidopsis* researchers and also for those engaged in plant molecular biology in general.

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