
Book Review

Arabidopsis: A Laboratory Manual. D. WEIGEL & J. GLAZEBROOK. Cold Spring Harbor Laboratory Press. 2002. 354 pages. ISBN 0 87969 573 0. Price \$115. (concealed wire binding). ISBN 0 87969 572 2. Price \$180 (hardcover).

Arabidopsis thaliana, a small weed in the cabbage family, is now the favoured organism for research in plant molecular genetics. A variety of convenient features have led to its ascendancy. Plants are small and have a rapid life cycle, relative to most other plants used in genetical research, so that large populations can be grown in limited laboratory space. The genome is small and its complete sequence was determined at the end of the last millennium, facilitating reverse genetic, microarray and other post-genomic methods of analysis. Lastly, it is well suited for many methods of molecular genetic analysis. For example, genetic transformation of *Arabidopsis* is now straightforward to an almost laughable degree – If flowers are immersed in a solution of *Agrobacterium tumefaciens* and seed subsequently harvested, a small proportion are found to be stably transformed by integration of DNA from the *Agrobacterium*. The popularity of this weed, together with the wide range of practical techniques that have been developed, means that a user-friendly compilation of methodologies is always welcome. In *Arabidopsis: A Laboratory Manual*, Weigel and Glazebrook provide a well set

out and up to date guide to techniques for molecular, genetic and phenotypic analysis. Although some of the techniques, such as transformation by floral dipping, are specific for *Arabidopsis*, many are broadly applicable for work on many other plant species. Since acquiring my review copy – an agreeable perk given the exorbitant price of this book – I have found it both extremely useful and very elusive, a result of many people removing it from my office and a clear indication that the manual is portable and valuable. The book covers a very wide range of techniques in a small space. Rather than include numerous different protocols, one or two protocols are given. In those cases for which I have practical experience, these are reliable and robust ones. The protocols are described in sufficient detail that they are feasible for the inexperienced. Many of the protocols have been developed from a regular summer practical course held at Cold Spring Harbor Laboratory, which is a good sign as it means they were developed by people with expertise in a particular area, and have proved reliable and robust. With the exception of the price, which is high, I have no hesitation in highly recommending the book.

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