

Nester, E., Gordon, M.P., Kerr, A. (ed.): *Agrobacterium tumefaciens – From Plant Pathology to Biotechnology*. - APS Press, St. Paul 2005. 320 pp. ISBN 0-89054-322-4.

The book *Agrobacterium tumefaciens – From Plant Pathology to Biotechnology*, edited by E. Nester, M.P. Gordon and A. Kerr is dedicated to Jeff Schell. It is not a textbook of plant biotechnology or a manual full of laboratory protocols. Instead, it is an anthology bringing together seminal research articles, starting with the description of plant tumor of bacterial origin by Smith and Townsend (1907) and with postulation of a tumor-inducing factor responsible for uncontrolled propagation of plant tissue in absence of *Agrobacterium* (1940s). Emphasis is posed on fundamental discoveries achieved in 1980s, which resulted from the introduction of molecular techniques into plant science. In the beginning, T-DNA region of *Agrobacterium* Ti plasmid was identified to have been a previously postulated tumor inducing principle and its insertion into plant genomic DNA was confirmed. Soon afterwards, short repeats at the right and left borders of T-DNA were recognized as minimum DNA stretches sufficient to mediate transfer of foreign DNA into plant genome. This knowledge had paved a way to the development of wide spread binary vectors, which have been now routinely adopted in science and biotechnology. Contemporary research on *Agrobacterium* is documented by recent papers on

quorum sensing, complete genome sequencing and biological control of crown gall disease.

Each chapter of this *Agrobacterium* saga is accompanied by a commentary of key authors of important papers or (if they are not alive) by their students and followers. This part of anthology is of extraordinary interest not only for researchers in plant science and biotechnology, but also for students, high school teachers, journalists, politicians; simply for anybody, who is interested in science, its history and social consequences. Readers will appreciate personal memories of important events which led to fundamental discoveries. Well known scientists underlined importance of creative environment, and exchange of ideas and peoples among collaborating labs in the field. The *Agrobacterium* story demonstrated how basic, curiosity-driven research resulted into important discoveries adopted later by biotechnology and breeding business.

Taken together, the anthology *Agrobacterium tumefaciens – From Plant Pathology to Biotechnology* may be recommended not only to plant molecular biologists who will enjoy having many important *Agrobacterium* papers at hand, but also to wide public attracted by science.

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