Laimer, M., Rücker, W. (ed.): **Plant Tissue Culture. 100 Years Since Gottlieb Haberlandt.** – Springer-Verlag, Wien – New York 2003. ISBN 3-211-83839-2. 260 pp. € 78.00.

It is a pleasure to have an opportunity to enjoy this new book. The authors were highly successful in paying homage to this Austrian scientist. They describe with love and respect his life, work, and the historical aspects of the development of plant tissue cultures. The Haberlandt's publication "Kulturversuche mit isolierte Pflanzenzellen" appeared on February 6th, 1902 in Vienna. In this paper Haberlandt expressed his vision of the totipotency of plant cells. His idea marks the dawn of plant tissue cultures. The centenary of this publication makes an excellent opportunity for a voyage throughout the history of plant physiology towards the brave new world of biotechnology,

The first part of the book contains a facsimile of the original paper that is a true artistic masterpiece, and its translation into English in 1969. The second and third parts of the book describe Haberlandt's life and work. The early history of plant tissue cultures is described in the papers of Kohlenbach and Gautheret. These articles are rich in references of the classical physiological literature from the end of the 19th century up to the 80th years of the 20th century.

The fourth part of the book returns the reader into current times. It contains an overview of the important topics of plant tissue culture and points to the most promising areas of application. The authors do not come short in giving a courageous outlook into the future. The areas cover range from micropropagation of ornamentals and forest trees, production of pharmaceutically interesting compounds, plant breeding for an improved nutritional value of staple crops, and genetic engineering of crop plants including trees, to cryopreservation of valuable germplasm.

It is possible to argue about the list of the most important plant physiological issues but the importance of the application of plant tissue cultures in present plant physiology can be hardly overestimated. This book should not be missing on the bookshelf of plant physiologists and students interested in roots of biological research and its resources. It can renew the interest in plant tissue cultures in researchers from other fields of biology and illustrate the development of biological research to laypersons.

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