

The publication on "Culturversuche mit isolierten Pflanzenzellen" by the Austrian plant physiologist Gottlieb Haberlandt appeared in 1902, one hundred years ago, in Vienna. Haberlandt's vision of the totipotency of plant cells represents the actual beginning of tissue culture. This book pays homage to a great Austrian scientist and the further development of his ideas. The first part of the book contains a facsimile of the original paper which is a true artistic masterpiece and its first translation into English in 1969. The second and third parts describe Haberlandt's life and work and early historical aspects of the development of plant tissue culture. Who could give a better glance into the early days of plant tissue culture than R.J. Gautheret? It was from his laboratory in Paris that the senior editor brought this technique and knowledge to Vienna and established this field of research here in Austria. The fourth part of the book contains an overview of important topics of plant tissue culture with the most promising areas of application at present time and an outlook into the future. Areas range from micropropagation, production of pharmaceutically interesting compounds, plant breeding, genetic engineering of crop plants from rice to trees, and cryopreservation of valuable germplasm.