

Lindsey, K. (ed.): **Plant Tissue Culture Manual**. Supplement 4. Kluwer Academic Publishers, Dordrecht - Boston - London 1995.

Plant tissue culture has a long history, since the end of the 19<sup>th</sup> century concepts and techniques have reached a level of usefulness and application which has never been greater. The book is composed of seven sections, the latest one is completely new in the fourth supplement and the text is complemented with index.

Section A "Basic techniques-cell & tissue culture of model species" deals with media preparation and composition, facilities and equipment, also the molecular masses of important components are presented. There are survey of basic techniques of initiation and maintenance of various plant cultures (cell, shoot and root cultures), embryogenesis, regeneration, transformation, *etc.* The other sections are: "Tissue culture & transformation of crop species" (cereals, orchardgrass, oilseed rape, tomato, potato, sugarbeet, *etc.*), "Propagation & conservation of germplasm", "Direct gene transfer & protoplast fusion", "Reproductive tissues", "Mutant selection", "Secondary metabolites". These sections involve characteristic of plant tissue culture methodology for a few model plants - each species requires a carefully optimised protocols for callus culture initiation, protoplast isolation and culture or plant regeneration following *Agrobacterium*-mediated transformation.

There are figures, photographs, diagrams, tables and a detailed bibliography in each section. The manual is convenient as for student, as for scientists of diverse backgrounds, including those with little or no experience, because contains step-by-step protocols with on introducing text and practical footnotes. In this latest issue is added up-to-date information about clonal propagation of eucalypts and the new section about secondary metabolites (tropane alkaloid biosynthesis and anthocyanin one). The manual is recommended for all plant tissue culture laboratories.

D. SOUČKOVÁ (*Praha*)