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Nota di contenuto	APPLICATIONS OF PLANT CELL AND TISSUE CULTURE; Contents; Participants; Introduction; Herbicide-resistant plants from cultured cells; Somaclonal variation; Applications of cell and tissue culture in tree improvement; The induction of embryogenesis in Nicotiana immature pollen in culture; Producing fertile somatic hybrids; Application of microinjection to a high frequency and synchronous somatic embryogenesis system in carrot suspension cultures; Protoplast fusion-mediated transfer of male sterility and other plasmone- control led traits Analysis of chloroplast parasexual hybrid calli genomes inTransformation of plant cells; Direct gene transfer to plants; Germ p lasm p resewat ion; Elicitation and metabolism of phytoalexins in plant cell cultures; Biosynthesis of tropane alkaloids; Biotechnological approaches to the production of isoquinoline alkaloids; Industrial production of shikonin and berberine; Problems in commercial

exploitation of plant cell cultures; General discussion; Index of contributors; Subject index

Sommario/riassunto

This work deals with basic plant physiology and cytology, and addresses the practical exploitation of plants, both as crops and as sources of useful compounds produced as secondary metabolites. Covers problems of commercial exploitation, socio-legal aspects of genetic engineering of crop plants, and of the difficulties of marketing natural compounds produced by cells under artificial conditions.
