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   Autore   Roshchina Victoria V

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   Soggetti   Plant physiology
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                        Plant Sciences

   Lingua di pubblicazione   Inglese

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   Nota di contenuto   Preface -- Introduction -- 1. Approaches to Choice of Model Systems for Microscopic Studies -- 2. Intact Secretory Cells as Models – Acceptors Sensitive to Secretory Products -- 3. Models – Acceptors of Secretions and their Reactions on Exometabolites -- 4. Modeling of Cell-Cell Contacts -- 5. Application of Models in Pharmacology, Medicine and Ecology -- Conclusion -- References -- Subject Index -- Latin Index.

   Sommario/riassunto   Biological models are known as living systems needed for experimental studies. On similar objects one could analyze characteristics, features, and laws of biological processes occurred in real complex organisms, but also clearly seen in more simple living systems, better suitable for experimental studies. In fundamental studies of plant excretory function various simple model systems also may be used. Modeling of

processes is one of the experimental approaches to study mechanisms of intercellular signaling in chemical communication of organisms. Not much we know about cellular models can be used in vital regime without fixation and vivisection. That is why similar model systems are of our interest today. Plant model systems suitable for vital microscopic analysis of excretory function studied by the author the last 15 years are represented in this monograph. Attention is paid to new cellular models that permit to estimate the accumulation and release of the secretions, their biological effects, including signaling and contacts with other cells.