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Nota di contenuto	ANNUAL PLANT REVIEWS VOLUME 37; CONTENTS; CONTRIBUTORS; PREFACE; Chapter 1 ARABIDOPSIS ROOT DEVELOPMENT; 1.1 Introduction; 1.2 Specification of the apical and basal cell lineage; 1.3 Root stem cell niche specification; 1.4 Radial patterning; 1.5 Stem cell maintenance; 1.6 Meristem maintenance and root zonation; 1.7 Meristem activation, root growth and cell division; 1.8 Concluding remarks; Chapter 2 VASCULAR MORPHOGENESIS DURING ROOT DEVELOPMENT; 2.1 Introduction; 2.2 The Arabidopsis root vascular system; 2.3 Molecular genetics of the stele: a rapidly developing field 2.4 Vascular genomics - getting the big pictureChapter 3 ROOT EPIDERMAL DEVELOPMENT IN ARABIDOPSIS; 3.1 Introduction; 3.2 Establishment of the epidermis in Arabidopsis; 3.3 Establishment of distinct cell fates in the root epidermis; 3.4 Root hair initiation and tip growth; 3.5 Effects of nutrients on root hair cell differentiation and morphogenesis; 3.6 Root hairs and nutrient uptake; 3.7 Perspectives; Chapter 4 LATERAL ROOT FORMATION; 4.1 Introduction; 4.2 How does a single lateral root form?; 4.3 How are the number and placement of lateral roots determined?

4.4 Agricultural importance of lateral root formationChapter 5 ADVENTITIOUS ROOT FORMATION: NEW INSIGHTS AND PERSPECTIVES; 5.1 Introduction; 5.2 Role and origin of ARs; 5.3 Factors influencing adventitious rooting; 5.4 New insights into genetics and molecular mechanisms involved in adventitious rooting; 5.5 Conclusion and perspectives; Chapter 6 ROOT GRAVITROPISM; 6.1 Introduction; 6.2 Gravity perception; 6.3 Root gravitropic signal transmission; 6.4 The root gravitropic response; 6.5 Attenuating the root gravitropic response; 6.6 Future directions
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11.1 Introduction

Sommario/riassunto

Root Development is an extremely exciting new title in Blackwell Publishing's Annual Plant Reviews Series (Series Editor Profesor Jeremy Roberts). The book consists of contributions from author groups based at many of the World's formeost laboratories working in the root development area. The book's editor Tom Beeckman, himself very well known and respected for his work in this area, has drawn together an exceptional set of core cutting edge reviews of the subject, providing a state of the art reference tool for all those researching in this area.