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Self-organizing Mechanism Controls the Localized Auxin Transport Critical for PC MorphogenesisCoordination of Interdigitative Growth by Auxin; Connecting Signals to Rop GTPases: GEFs as Activators of ROP Signaling; Future Perspectives; Acknowledgements; References; Chapter 7 Xylem Cell Wall Pattern Formation Regulated by Microtubule-associated Proteins and ROP GTPases; Introduction; Microtubules and Secondary Wall Development in Xylem Cells; Experimental Systems using Arabidopsis for Study of Xylem Cell Differentiation; Secondary Cell Wall Patterning in Xylem Cells
Membrane Traffic and Cellulose Synthesis Activity are Essential for Secondary Wall Patterning

Sommario/riassunto

Cell walls are defining feature of plant life. The unique and multi-faceted role they play in plant growth and development has long been of interest to students and researchers. Plant Cell Wall Patterning and Cell Shape looks at the diverse function of cell walls in plant development, intercellular communication, and defining cell shape. Plant Cell Wall Patterning and Cell Shape is divided into three sections. The first section looks at role cell walls play in defining cell shape. The second section looks more broadly at plant development. While the third and final section looks at new insights