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in an Unsaturated Media; 3.3.3 Richards Equation, Boundary and Initial Conditions; 3.3.4 Wetting and Redistribution of Water in Soilless Media - Container Capacity; 3.4 Uptake of Water by Plants in Soilless Media and Water Availability; 3.4.1 Root Water Uptake; 3.4.2 Modelling Root Water Uptake; 3.4.3 Determining Momentary and Daily Water Uptake Rate

3.4.4 Roots Uptake Distribution Within Growing Containers3.4.5 Water Availability vs. Atmospheric Demand; 3.5 Solute Transport in Soilless Media; 3.5.1 Transport Mechanisms - Diffusion, Dispersion, Convection; 3.5.2 Convection-Dispersion Equation; 3.5.3 Adsorption - Linear and Non-linear; 3.5.4 Non-equilibrium Transport - Physical and Chemical Non-equilibria; 3.5.5 Modelling Root Nutrient Uptake - Single-root and Root-system; 3.6 Gas Transport in Soilless Media; 3.6.1 General Concepts; 3.6.2 Mechanisms of Gas Transport; 3.6.3 Modelling Gas Transport in Soilless Media; References

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4.5.3 High Frequency Irrigation

| Sommario/riassunto | Plant production in hydroponics and soilless culture is rapidly expanding throughout the world, raising a great interest in the scientific community. For the first time in an authoritative reference book, authors cover both theoretical and practical aspects of hydroponics (growing plants without the use of soil). This reference book covers the state-of-the-art in this area, while offering a clear view of supplying plants with nutrients other than soil. Soilless Culture provides the reader with an understanding of the properties of the various soiless media and how these properties affec |