

Introduction

Phosphorus is an essential element for all living organisms. It is a component of nucleic acids, phospholipids, and many other biomolecules. In plants, phosphorus is involved in energy transfer and photosynthesis. In animals, it is important for bone formation and cell signaling. In microorganisms, phosphorus is used for energy storage and as a component of cell walls. The availability of phosphorus in the environment is a major factor limiting plant growth and microbial activity. This special issue focuses on the role of phosphorus in various biological systems and the mechanisms of phosphorus uptake and utilization.

Phosphorus Storage Compounds in Microorganisms

Microorganisms have evolved various strategies to store phosphorus in the form of polyphosphates, phosphonates, and other compounds. These storage compounds play a crucial role in maintaining phosphorus levels during periods of scarcity. The storage of phosphorus in microorganisms is a complex process involving the synthesis and degradation of phosphorus-containing molecules. This special issue provides a comprehensive overview of the different phosphorus storage compounds found in microorganisms and the mechanisms of their synthesis and regulation.

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Polyphosphate and Apatite: An Evolutionary Insight

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