

Plant Nutrition and Transport

I. Nutrients

What are nutrients?
N-P-K fertilizers

II. Absorption of Water and Minerals

Root hairs
Root vascular cylinder

III. Transport of Water

A. Transpiration

Driven by pressure differentials
Cohesion-tension theory

B. Regulation of transpiration and water conservation

Cuticle
Stomata
Guard cells

IV. Transport of Organic Compounds

Translocation
Concentration gradients
Water pressure