

Secondary Growth in Stems
Chapter 26

Secondary Growth

- Definition
- Lateral meristems

Chapter Outline

- Annuals, biennials, perennials
- The vascular cambium
- Effect of secondary growth on the primary body of the stem
- Wood: secondary xylem

Annuals, Biennials, Perennials

- Annuals
- Biennials
- Perennials

The Vascular Cambium

- Initials
- Temperate vs. tropical patterns of growth

Effect of Secondary Growth on the Primary Body of the Stem

- Cambium
 - Fascicular
 - Interfascicular
- Pattern of xylem and phloem production
- *Sambucus* example
- *Tilia* example
- Periderm
- Comparison with secondary growth in root
- Lenticels
- Bark

Wood: Secondary Xylem

- Uses of wood
- Conifer wood
- Angiosperm wood
- Growth rings

- Annual rings vs. false annual rings
- Sapwood and heartwood
- Reaction wood
- Strength of wood
 - Density
 - Specific gravity

Summary

- Secondary growth definition
- Classification of plants
- Vascular cambium
- Cork cambium
- What is bark?
- What is wood?
- Growth rings
- Reaction wood
- Compare secondary growth in stems and roots