

Dicot Root

Helianthus (Sunflower)

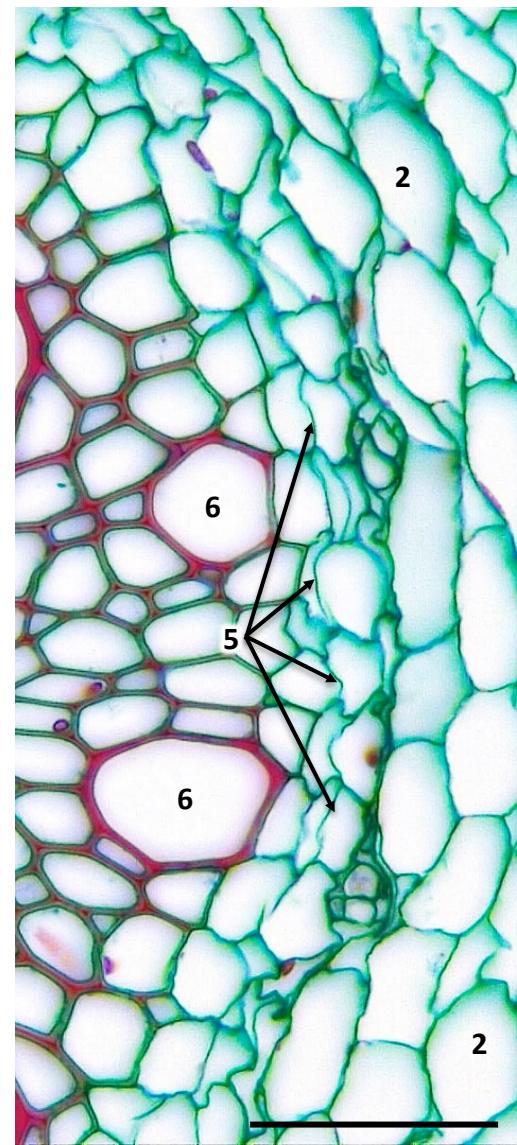
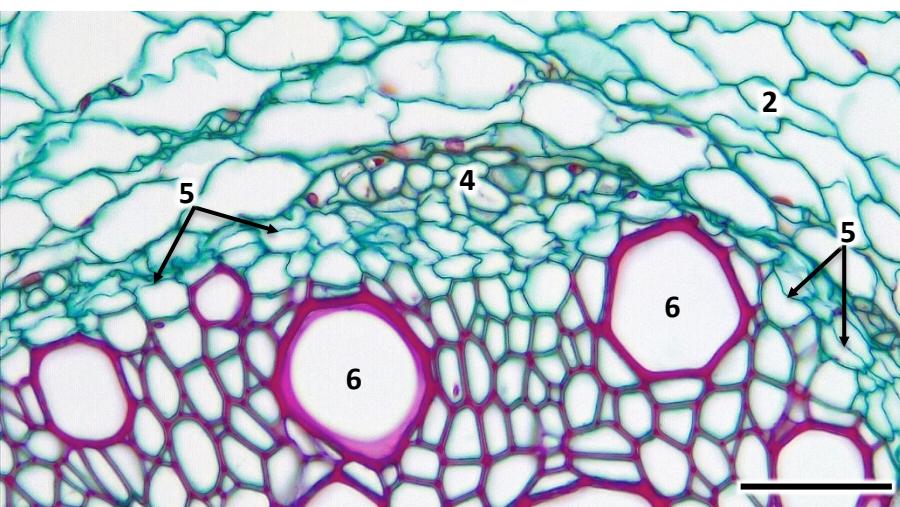
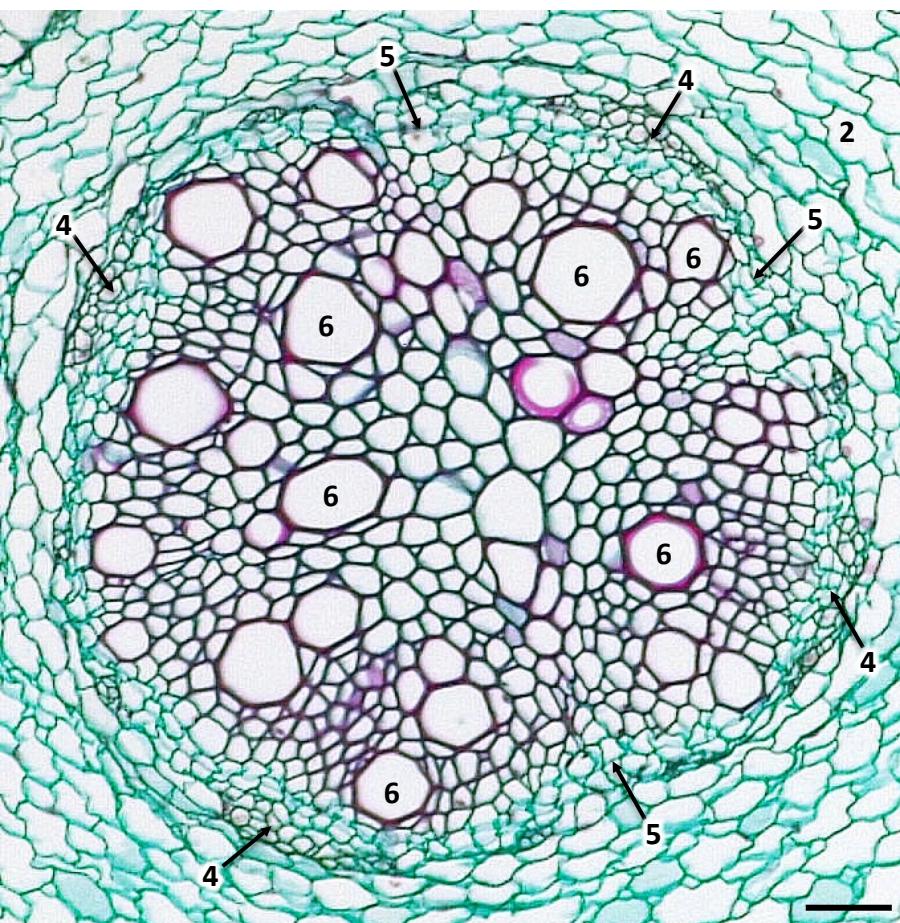
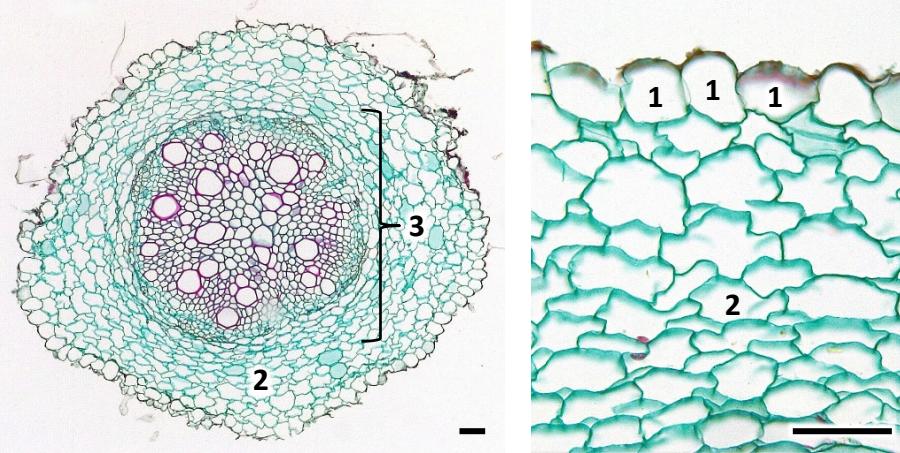
1. Epidermis
2. Cortex
3. Vascular cylinder (stele)
4. Primary phloem
5. Vascular cambium
6. Xylem vessel element

Transverse sections

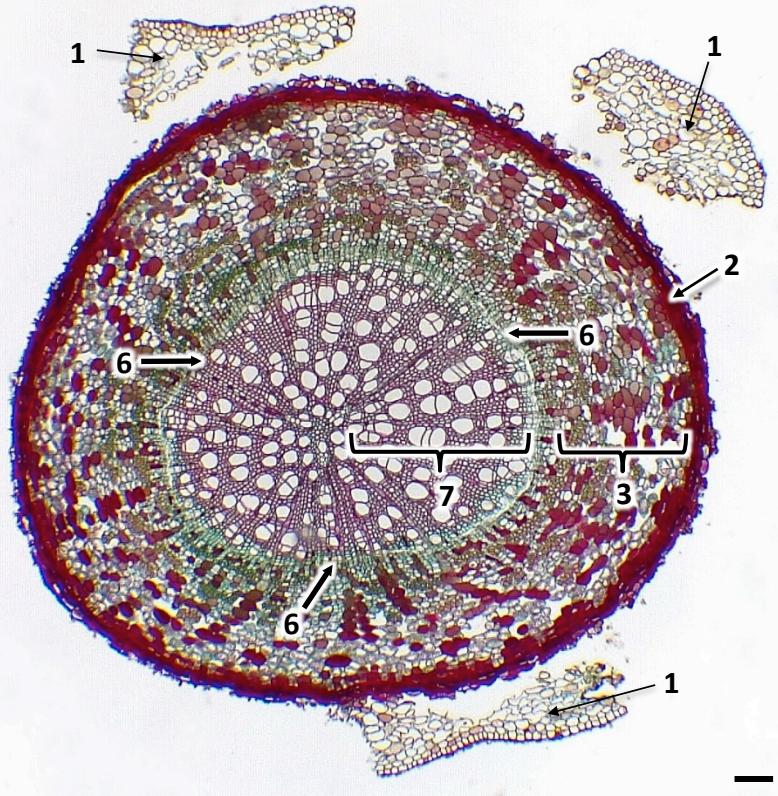
Bar = 50 µm



Horton Lai and Carol Wenzel. 2020

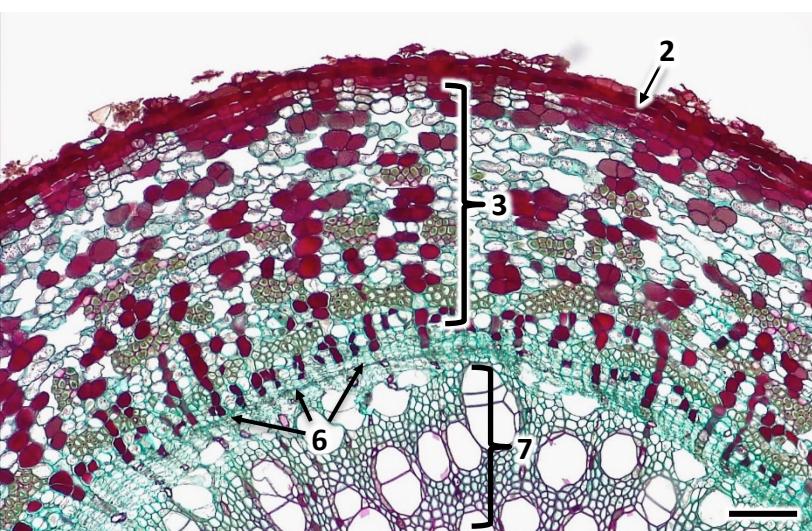


Dicot Root Secondary growth



1. Epidermis & cortex remnant
2. Periderm
3. Secondary phloem
4. Secondary phloem fiber
5. Secondary phloem parenchyma
- 5*. Secondary phloem parenchyma, filled with 2° metabolites
6. Vascular cambium
7. Secondary xylem
8. Tracheid
9. Xylem vessel element
10. Primary xylem

Transverse sections



Bar = 100 µm Horton Lai and Carol Wenzel, 2020

