

LAB 5: DIVERSITY—PLANTS

PURPOSE: Learn the characteristics of different groups of plants: focus on reproduction and dispersal.

p. 345-347 Kingdom Plantae: Introduction, Alternation of generations (the plant life cycle), Classification

p. 348-358 The Seedless Plants

p. 348-350 section 25.3 Seedless nonvascular plants (example: moss)

__ moss gametophyte: observe live plants

__ demonstration slides showing male and female gametophyte

__ moss sporophyte: observe live plants (*No slide*)

SKIP LIVERWORTS

p. 352-357 section 25.4 Seedless vascular plants (example: ferns)

p. 352 do top of page only. SKIP WHISK FERN, CLUB MOSS, HORSETAIL

__ observe fern diversity: whole fronds

__ fern sporophyte: observe cut fronds under dissection scope

__ slide of sorus cross-section (demo)

__ fern gametophyte: make wet mount and compare to Fig 25.12. Look for swimming sperm! (*No plastomount*)

__ fern gametophyte: take slide to your desk, compare to Fig 25.12

Good review: p. 358

p. 359-365 The Seed plants

p. 360-361 Gymnosperms: Conifers (example: pine)

__ observe and identify pine leaf

__ male and female pine cones

__ demo slides of male and female cones, pollen and seeds

p. 365-367 Section 26.2 Angiosperms (example: assorted)

SKIP LIFE CYCLE

__ observe parts of the flower

p. C15-C18 Pollination, Dispersal of Angiosperms

__ photo slides in caramate

__ observe fruits

Good review: p. C18, p. 375 #s 1, 3, 6, 7, 8, 10-13, 15, 16.