

Lab 7: Seed Plants

pp. C19, C21-C24, 379-386, 389, 390

GOALS:

- Draw a diagram of the plant life cycle for gymnosperms and angiosperms.
- Describe characteristics of gymnosperms and angiosperms.
- Know the pollination mechanisms for the flowers on p.C22.
- Know the dispersal mechanisms for the fruits on p.C23.
- Know the parts of a flower.

KEY TERMS (*italicized are repeats from last week*):

<i>gymnosperm</i>	<i>angiosperm</i>	<i>alternation of generations</i>
<i>sporophyte</i>	<i>gametophyte</i>	<i>gametes</i>
<i>zygote</i>	<i>haploid</i>	<i>diploid</i>
<i>seed</i>	<i>spore</i>	<i>fertilization</i>
megaspore	microspore	pollen cone
seed cone	pollen grain	pollination
pollen tube	double fertilization	stamen
anther	filament	carpel
stigma	style	ovary
ovule	endosperm	flower
fruit	receptacle	sepals
petals	stamen	pollination agent
pollination syndrome	dispersal	fruit dispersal

I. Seed plants:

p.379: read introduction.

II. Gymnosperms:

pp. 380-384 (top): read, follow directions and answer questions. Fill in chart on C19.

- Pine branches with needles and cones (male and female).
- Demo-slides of male pollen cone.
- Demo-slide of female seed cone.

III. Angiosperms:

pp. 386 and 389: read, follow directions and answer questions. Fill in chart on C19.

- p. 386: Do flower observation in groups of four. Save flower for page 389.
- p. 389: read, follow directions and answer questions.
- Observe the pre-dissected flower to review structures.

IV. Chapter Review:

p. 390: **ANSWER NUMBERS:** 1, 3, 8, 10, 12, 15, 16.

V. Success of angiosperms:

pp. C21-C24: read, follow directions, fill in chart on C23 and answer questions.

- View slides on computer in the back of the room. Try to predict the pollinator by looking at the flower. Know the pollination syndrome and agent for flowers indicated by your instructor.
- View the different fruits on display. Hypothesize on how they are dispersed and fill in table on p. C 23.
- Answer questions on C24.