

# PLB 116 Winter 2006

Printed by: Doug  
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## Lab 1 Review Of Anatomy And Life Cycle

Jan 5, 2006

Quantity	Plant Material	Date planted	Days	Directions
1-7.5" pot	Corn pollen	Nov 10, 2005	56	5 seeds/pot 3pl/pot
1-7.5" pot	Corn pollen	Nov 5, 2005	61	5 seeds/pot 3pl/pot
1-7.5" pot	Corn pollen	Nov 15, 2005	51	5 seeds/pot 3pl/pot
1	Equisetum	Jan 5, 2006		
1	Fern	Jan 5, 2006		
1	Fern	Jan 5, 2006		
	Fern gametophytes. Some with	Jan 5, 2006		
40 seed	Pea seed	Jan 4, 2006	1	Soak in tray of water.
	Pine branch with old cones	Jan 5, 2006		

## Lab 2 Charophyta, Bryophytes, Rhyniophyta

Jan 10, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Anthoceros (hornwort)	Jan 10, 2006		
	Chara or Nitella	Jan 10, 2006		
	Coleochaete on slides, started 11/20	Jan 10, 2006		
	Japanese Psilotum with sporangia on	Jan 10, 2006		
	Marchantia w/sporophytes	Nov 29, 2005	42	For student dissection
	Marchantia with Gemmae	Jan 10, 2006		
	Moss w/sporophytes	Jan 10, 2006		For student dissection
	Moss with tiny, upright sporophytes.	Jan 10, 2006		

## Lab 3 Lycopodium

Jan 12, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Lycopodium lucidulum	Jan 12, 2006		
	Lycopodium squarrosum	Jan 12, 2006		

## **Lab 4 Selaginella, Angle Meristem Experiment**

Jan 17, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Selaginella	Jan 17, 2006		
	Selaginella	Jan 17, 2006		
	Selaginella	Jan 17, 2006		
	Selaginella	Jan 17, 2006		
9 lg flats	Selaginella	Aug 30, 2005	140	Propagate if needed.
	Selaginella	Jan 17, 2006		
	Selaginella martensii (2 flats)and	Jan 17, 2006		
	Selaginella sporelings still attached to	Jan 17, 2006		
	Selaginella, many diverse species.	Jan 17, 2006		

## **Lab 5 Lepidodendrales**

Jan 19, 2006

Quantity	Plant Material	Date planted	Days	Directions
	100 plastic petri dishes of washed	Jan 19, 2006		
	40 4" pots, labels, and sunshine mix, liter	Jan 19, 2006		
	5 species of fern spores to sow--	Jan 19, 2006		
	Fern spores for students	Jan 19, 2006		
	Lycopodium, anything available	Jan 19, 2006		
	No living plants	Jan 19, 2006		
	Sow fern spores	Jan 19, 2006		

## **Lab 6 Isoetes, Mold Cast Technique**

Jan 24, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Any small plant for molding	Jan 24, 2006		
	Isoetes	Jan 24, 2006		
	Small plant parts for molding demo:	Jan 24, 2006		

## **Lab 7 Psilophyta**

Jan 26, 2006

Quantity	Plant Material	Date planted	Days	Directions
2 pots	Psilotum & gametophytes	Jan 26, 2006		

Psilotum nudum'Bunryuzan'

Jan 26, 2006

**Lab 8 Spenophyta**

Jan 31, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Bring in lots of E. diffusum and one in	Jan 31, 2006		
	E. giganteum	Jan 31, 2006		
	E. giganteum B93.314	Jan 31, 2006		
	E. ramosissimum	Jan 31, 2006		
	E. ramosissimum B85.024 small,	Jan 31, 2006		
2	Equisetum	Dec 17, 2005	45	Move to warm long days. Weier is good for this.
2	Equisetum diffusum strobili	Dec 22, 2005	40	Dig up and move into greenhouse.
	Equisetum--all available species and	Jan 31, 2006		

**Lab 9 Eusporangiate Ferns**

Feb 2, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Angiopteris pinnae	Feb 2, 2006		
	Angiopteris--lg fern in main room	Feb 2, 2006		
	Botrychium	Feb 2, 2006		
	Botrychium--in 2nd fern room B98.084	Feb 2, 2006		
	Danaea	Feb 2, 2006		
	Macroglossum--1st fern room B89.353	Feb 2, 2006		
	Marattia	Feb 2, 2006		
	Marattia fraxinea--2nd fern room	Feb 2, 2006		
	Ophioglossum	Feb 2, 2006		
2	Ophioglossum	Feb 2, 2006		
	Ophioglossum B59.137	Feb 2, 2006		
	Polypodium chunks	Feb 2, 2006		
	Polypodium plant chunks--lg, hanging in	Feb 2, 2006		

**Lab 10 Filicales**

Feb 7, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Adiantum	Feb 7, 2006		

Asplenium	Feb 7, 2006		
Asplenium, Cionidium	Feb 7, 2006		
Cyrtomium	Feb 7, 2006		
Davallia	Feb 7, 2006		
Davallia--about 10 inches of rhizomes	Feb 7, 2006		
Dennstaedtia	Feb 7, 2006		
Dryopteris	Feb 7, 2006		
Dryopteris, Cyrtomium, Woodwardia w/	Feb 7, 2006		
Fern fronds showing soral and	Feb 7, 2006		
Fronds of Polypodium and	Feb 7, 2006		
Lygodium	Feb 7, 2006		
Lygodium, Osmunda, Dennstaedtia,	Feb 7, 2006		
Osmunda	Feb 7, 2006		
Pityrogramma	Dec 9, 2005	60	Move to Weier greenhouse for long warm days.
Platynerium	Feb 7, 2006		
Polypodium portions	Feb 7, 2006		
Rhizomes of Hypolepis (or Polypodium)	Feb 7, 2006		
Rumohra and Cystopteris	Feb 7, 2006		Can use different genera.
Woodwardia	Feb 7, 2006		

## **Lab 11 Filicales, Marsileales, Salviniiales**

Feb 9, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Azolla	Feb 9, 2006		
	Azolla, Marsilea, Pilularia, Regnellidium	Feb 9, 2006		
	fern gametophytes w/ attached	Feb 9, 2006		
30	Fern Gametophytes with sporophytes	Nov 11, 2005	90	Check Oasis blocks for fern Gametophytes
30	Fern Gametophytes without sporophytes	Nov 11, 2005	90	Check Oasis blocks for fern Gametophytes
	Hypolepis rhizomes to section	Feb 9, 2006		
	Marsilea	Feb 9, 2006		
	Marsilea drummondii sporocarps	Feb 9, 2006		
	Pilularia-check 2 weeks ahead to be	Feb 9, 2006		
	Polypodium aureum gametophytes	Feb 9, 2006		

Polypodium dispersum gametophytes Feb 9, 2006

Regnilidium--west of 61. check with Tim Feb 9, 2006

Salvinia--in fern/orchid room and heat Feb 9, 2006

## **Lab 12 Seed Ferns And Cycads, Cycad Tour**

Feb 14, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Bowenia (leaf like) B84.298	Feb 14, 2006		
	Cycad seed	Jul 9, 2005	220	Purchase seed if needed.
	Cycads, various plants/male and female	Feb 14, 2006		
3 - 5" pots	Cycas revoluta seedlings	Oct 17, 2005	120	6 seed/pot
2 - 7.5" pots	Dioon seedlings	Oct 17, 2005	120	6-8 seeds/pot, cover with sand.
	Dioon sp. B90.482	Feb 14, 2006		
	Encephalartos horridus (spikey one)	Feb 14, 2006		
	small Cycas revoluta B89.003	Feb 14, 2006		
	small Zamia	Feb 14, 2006		
	Stangeria B 89.006	Feb 14, 2006		
	Zamia pumila	Feb 14, 2006		

## **Lab 13 Cycadales And Ginkgo**

Feb 16, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Cycad seedlings again	Feb 16, 2006		
	Cycads, seedlings and female cones	Feb 16, 2006		
2	Ginkgo	Dec 28, 2005	50	Move to long days.
	Ginkgo--forced tree and 6or 7 18"	Feb 16, 2006		

## **Lab 14 Coniferales And Conifer Tour**

Feb 21, 2006

Quantity	Plant Material	Date planted	Days	Directions
	any potted conifers available, including	Feb 21, 2006		
	Araucaria	Feb 21, 2006		
	branches, with cones of: Abies	Feb 21, 2006		
	Calocedrus	Feb 21, 2006		
	Cedrus	Feb 21, 2006		

Cupressus	Feb 21, 2006
Juniperus	Feb 21, 2006
lots of 1st and 2nd year cones	Feb 21, 2006
Metasequoia	Feb 21, 2006
Picea	Feb 21, 2006
Pinus coulteri	Feb 21, 2006
Pinus halepensis, 2-3 years of cones.	Feb 21, 2006
Pinus sabiniana	Feb 21, 2006
Pinus torreyana	Feb 21, 2006
Podocarpus, C St bet 5th and 6th	Feb 21, 2006
Pseudotsuga	Feb 21, 2006
Sequoia	Feb 21, 2006
Sequoiadendron	Feb 21, 2006
Taxus	Feb 21, 2006
Thuja, by Mrak	Feb 21, 2006
Torreya, 25 yds west of desert bridge.	Feb 21, 2006

## **Lab 15 Coniferales**

Feb 23, 2006

Quantity	Plant Material	Date planted	Days	Directions
1/4 pound of	Pinyon pine seed	Feb 23, 2006		
3 - 4" pots	Pinyon pine seedlings	Jan 24, 2006	30	5 seed/pot

## **Lab 16 Gnetophyta And Greenhouse Tour**

Feb 28, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Ephedra	Feb 28, 2006		
	Ephedra	Feb 28, 2006		
1	Gnetum	Feb 28, 2006		
1	Gnetum, cones if available	Feb 28, 2006		
1/4 pound of	Pinyon pine seed	Feb 28, 2006		
2 seedlings	Welwitschia seedlings with cotyledons	Dec 15, 2005	75	8 - rose pots pumice w/soil at bottom
	Welwitschia, mature plants, seedlings,	Feb 28, 2006		

## **Lab 17 Angiosperm Wood Anatomy and Floral Development - Stamens And Pollen**

Mar 2, 2006

Quantity	Plant Material	Date planted	Days	Directions
2 plants	Asclepias curassavica flowers	Mar 2, 2006		Enter directions here
	Clematis flowers	Mar 2, 2006		
2	Impatiens w/pollen--yellow and red	Mar 2, 2006		
2	Impatiens, simple pink flower.	Dec 2, 2005	90	4 cuttings
	Tradescantia	Mar 2, 2006		
	Tradescantia flowers w/pollen	Mar 2, 2006		

## **Lab 18 Angiosperm Reproduction - Embryo Sac And Embryogeny**

Mar 7, 2006

Quantity	Plant Material	Date planted	Days	Directions
2 - 6"pots	Capsella bursa-pastoris	Jan 24, 2006	42	2 - 6" pots, cover w/sand
2 - 6"pots	Capsella bursa-pastoris	Jan 10, 2006	56	2 - 6" pots, cover w/sand
2 - 6"pots	Capsella bursa-pastoris	Feb 7, 2006	28	2 - 6" pots, cover w/sand

## **Lab 19 Angiosperm Reproduction - Fruit And Seeds**

Mar 9, 2006

Quantity	Plant Material	Date planted	Days	Directions
	1 cantaloupe	Mar 9, 2006		
	1 eggplant	Mar 9, 2006		
	1 mango	Mar 9, 2006		
	1 papaya	Mar 9, 2006		
	1 pepper	Mar 9, 2006		
	1 pineapple--but a week early	Mar 9, 2006		
	10 oranges	Mar 9, 2006		
	2 avocados	Mar 9, 2006		
	2 cucumbers	Mar 9, 2006		
	2 nectarine or peach	Mar 9, 2006		
	2 pears	Mar 9, 2006		
	2 plums	Mar 9, 2006		
	4 bananas	Mar 9, 2006		
	4 kiwi	Mar 9, 2006		

20-30 seed	Asclepias sp. seed with dispersal fibers	Mar 9, 2006	
	bag of apples	Mar 9, 2006	
?	Broad bean seed, Soak for 24 hours.	Mar 9, 2006	Enter directions here
	cherry tomatoes--bsk	Mar 9, 2006	
	coconut	Mar 9, 2006	
1	Corn ear	Mar 9, 2006	Purchase at store
?	Cotton seed, Soak for 24 hours.	Mar 9, 2006	Enter directions here
?	Cucumber or melon seed, Soak for 24	Mar 9, 2006	Enter directions here
	dried figs--pkg. Aisle 7	Mar 9, 2006	
	get purchase order not to exceed \$75:	Mar 9, 2006	
	grapes, seeded if possible	Mar 9, 2006	
	green beans--handful	Mar 9, 2006	
	Interesting fruits from Tim & Doug	Mar 9, 2006	FRUITS AND SEEDS
	interesting fruits from Tim:Asclepias, Pop	Mar 9, 2006	
?	Lupine seed, Soak for 24 hours.	Mar 9, 2006	Enter directions here
	mixed nuts (purchased around	Mar 9, 2006	
	okra, pickled (mild). Aisle 8	Mar 9, 2006	
?	Pea seed, SOAK FOR 24 HOURS.	Mar 9, 2006	
	peanuts--salted in bag. Aisle 7,	Mar 9, 2006	
	pomegranate	Mar 9, 2006	
	raspberries or blackberries--bsk	Mar 9, 2006	
	Seeds: peas, kidney beans, corn radish	Mar 9, 2006	
	Seeds: Barley, Fava, Castor bean,	Mar 9, 2006	FRUITS AND SEEDS
	smoked almonds--can	Mar 9, 2006	
	snow peas--handful	Mar 9, 2006	
	strawberries--bsk	Mar 9, 2006	
	sunflower seeds, salted--bag. Aisle 7	Mar 9, 2006	

## Lab 20 Lab Final

Mar 14, 2006

Quantity	Plant Material	Date planted	Days	Directions
	Lab final, no plants requested	Mar 14, 2006		