

PLB 116 Winter 2010

Created by: Doug
Created on: 11/9/2009
Sections:
Lab rooms:

Lab 1 Review Of Anatomy And Life Cycle

Jan 5, 2010

Quantity	Plant Material	Date planted	Days	Directions
1	Equisetum	Jan 5, 2010		
1	Fern	Jan 5, 2010		
1	Fern	Jan 5, 2010		
	Fern gametophytes. Some with	Jan 5, 2010		
	Pine branch with old cones	Jan 5, 2010		

Lab 2 Charophyta, Bryophytes, Rhyniophyta

Jan 7, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Anthoceros (hornwort)	Jan 7, 2010		
	Chara or Nitella	Jan 7, 2010		
	Coleochaete on slides, started 11/20	Jan 7, 2010		
	Japanese Psilotum with sporangia on tips.	Jan 7, 2010		
	Marchantia w/sporophytes	Nov 26, 2009	42	For student dissection
	Marchantia with Gemmae	Jan 7, 2010		
	Moss w/sporophytes	Jan 7, 2010		For student dissection
	Moss with tiny, upright sporophytes.	Jan 7, 2010		
2	Ricciocarpos	Jan 7, 2010		Enter directions here

Lab 3 Lycopodium

Jan 12, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Lycopodium lucidulum	Jan 12, 2010		
	Lycopodium squarrosum	Jan 12, 2010		

Lab 4 Selaginella, Angle Meristem Experiment

Jan 14, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Selaginella hardeiformes (red one)	Jan 14, 2010		

Selaginella martensii (2 flats)and	Jan 14, 2010
Selaginella pallescens	Jan 14, 2010
Selaginella sp.	Jan 14, 2010
Selaginella sporelings still attached to	Jan 14, 2010
Selaginella uncinata (blue one)	Jan 14, 2010
Selaginella viticulosa	Jan 14, 2010
Selaginella, many diverse species.	Jan 14, 2010

Lab 5 Lepidodendrales

Jan 19, 2010

Quantity	Plant Material	Date planted	Days	Directions
	100 plastic petri dishes of washed agar, .5X	Jan 19, 2010		
	40 4" pots, labels, and sunshine mix, liter	Jan 19, 2010		
	5 species of fern spores to sow--COLLECT	Jan 19, 2010		
	Fern spores for students	Jan 19, 2010		
	Lycopodium, anything available	Jan 19, 2010		
	Sow fern spores	Jan 19, 2010		

Lab 6 Isoetes, Mold Cast Technique

Jan 21, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Any small plant for molding	Jan 21, 2010		
	Isoetes	Jan 21, 2010		
	Small plant parts for molding demo: petals,	Jan 21, 2010		

Lab 7 Psilophyta

Jan 26, 2010

Quantity	Plant Material	Date planted	Days	Directions
2 pots	Psilotum & gametophytes	Jan 26, 2010		
	Psilotum nudum'Bunryuzan'	Jan 26, 2010		

Lab 8 Spenophyta

Jan 28, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Bring in lots of E. diffusum and one in	Jan 28, 2010		
	E. giganteum	Jan 28, 2010		

	E. giganteum B93.314	Jan 28, 2010		
	E. ramosissimum	Jan 28, 2010		
	E. ramosissimum B85.024 small, near	Jan 28, 2010		
2	Equisetum	Dec 14, 2009	45	Move to warm long days. Weier is good for this.
2	Equisetum diffusum strobili	Dec 19, 2009	40	Dig up and move into greenhouse.
	Equisetum--all available species and	Jan 28, 2010		

Lab 9 Eusporangiate Ferns

Feb 2, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Angiopteris pinnae	Feb 2, 2010		
	Angiopteris--lg fern in main room	Feb 2, 2010		
	Botrychium	Feb 2, 2010		
	Botrychium--in 2nd fern room B98.084	Feb 2, 2010		
	Danaea	Feb 2, 2010		
	Macroglossum--1st fern room B89.353	Feb 2, 2010		
	Marattia	Feb 2, 2010		
	Marattia fraxinea--2nd fern room B88.074	Feb 2, 2010		
	Ophioglossum	Feb 2, 2010		
2	Ophioglossum	Feb 2, 2010		
	Ophioglossum B59.137	Feb 2, 2010		
	Polypodium chunks	Feb 2, 2010		
	Polypodium plant chunks--lg, hanging in	Feb 2, 2010		

Lab 10 Filicales

Feb 4, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Adiantum	Feb 4, 2010		
	Asplenium	Feb 4, 2010		
	Asplenium, Cionidium	Feb 4, 2010		
	Cyrtomium	Feb 4, 2010		
	Davallia	Feb 4, 2010		
	Davallia--about 10 inches of rhizomes	Feb 4, 2010		
	Dennstaedtia	Feb 4, 2010		

Dryopteris	Feb 4, 2010
Dryopteris, Cyrtomium, Woodwardia w/	Feb 4, 2010
Fern fronds showing soral and sporangial	Feb 4, 2010
Fronds of Polypodium and	Feb 4, 2010
Lygodium	Feb 4, 2010
Lygodium, Osmunda, Dennstaedtia,	Feb 4, 2010
Osmunda	Feb 4, 2010
Pityrogramma	Dec 6, 2009
Platycerium	Feb 4, 2010
Polypodium portions	Feb 4, 2010
Rhizomes of Hypolepis (or Polypodium)	Feb 4, 2010
Rumohra and Cystopteris	Feb 4, 2010
Woodwardia	Feb 4, 2010

60 Move to Weier greenhouse for long warm days.

Can use different genera.

Lab 11 Filicales, Marsileales, Salviniiales

Feb 9, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Azolla	Feb 9, 2010		
	Azolla, Marsilea, Pilularia, Regnellidium	Feb 9, 2010		
	fern gametophytes w/ attached	Feb 9, 2010		
30	Fern Gametophytes with sporophytes	Nov 11, 2009	90	Check Oasis blocks for fern Gametophytes
30	Fern Gametophytes without sporophytes	Nov 11, 2009	90	Check Oasis blocks for fern Gametophytes
	Hypolepis rhizomes to section	Feb 9, 2010		
	Marsilea	Feb 9, 2010		
	Marsilea drummondii sporocarps	Feb 9, 2010		
	Pilularia-check 2 weeks ahead to be sure	Feb 9, 2010		
	Polypodium aureum gametophytes	Feb 9, 2010		
	Polypodium dispersum gametophytes	Feb 9, 2010		
	Regnellidium--west of 61. check with Tim 2	Feb 9, 2010		
	Salvinia--in fern/orchid room and heat	Feb 9, 2010		

Lab 12 Seed Ferns And Cycads, Cycad Tour

Feb 11, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Bowenia (leaf like) B84.298	Feb 11, 2010		
	Cycad seed	Jul 6, 2009	220	Purchase seed if needed.
	Cycads, various plants/male and female	Feb 11, 2010		
3 - 5" pots	Cycas revoluta seedlings	Oct 14, 2009	120	6 seed/pot
2 - 7.5" pots	Dioon seedlings	Oct 14, 2009	120	6-8 seeds/pot, cover with sand.
	Dioon sp. B90.482	Feb 11, 2010		
	Encephalartos horridus (spikey one)	Feb 11, 2010		
	small Cycas revoluta B89.003	Feb 11, 2010		
	small Zamia	Feb 11, 2010		
	Stangeria B 89.006	Feb 11, 2010		
	Zamia pumila	Feb 11, 2010		

Lab 13 Cycadales And Ginkgo

Feb 16, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Cycad seedlings again	Feb 16, 2010		
	Cycads, seedlings and female cones	Feb 16, 2010		
2	Ginkgo	Dec 28, 2009	50	Move to long days.
	Ginkgo--forced tree and 6or 7 18" branches	Feb 16, 2010		

Lab 14 Coniferales And Conifer Tour

Feb 18, 2010

Quantity	Plant Material	Date planted	Days	Directions
	any potted conifers available, including	Feb 18, 2010		
	Araucaria	Feb 18, 2010		
	branches, with cones of: Abies	Feb 18, 2010		
	Calocedrus	Feb 18, 2010		
	Cedrus	Feb 18, 2010		
	Cupressus	Feb 18, 2010		
	Juniperus	Feb 18, 2010		
	lots of 1st and 2nd year cones	Feb 18, 2010		

Metasequoia	Feb 18, 2010
Picea	Feb 18, 2010
Pinus coulteri	Feb 18, 2010
Pinus halepensis, 2-3 years of cones.	Feb 18, 2010
Pinus sabiniana	Feb 18, 2010
Pinus torreyana	Feb 18, 2010
Podocarpus, C St bet 5th and 6th	Feb 18, 2010
Pseudotsuga	Feb 18, 2010
Sequoia	Feb 18, 2010
Sequoiadendron	Feb 18, 2010
Taxus	Feb 18, 2010
Thuja, by Mrak	Feb 18, 2010
Torreyia, 25 yds west of desert bridge.	Feb 18, 2010

Lab 15 Coniferales

Feb 23, 2010

Quantity	Plant Material	Date planted	Days	Directions
1/4 pound of	Pinyon pine seed	Feb 23, 2010		
3 - 4" pots	Pinyon pine seedlings	Dec 15, 2009	70	21 seed, refrigerate, wet paper towel

Lab 16 Gnetophyta And Greenhouse Tour

Feb 25, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Ephedra	Feb 25, 2010		
	Ephedra	Feb 25, 2010		
1	Gnetum	Feb 25, 2010		
1	Gnetum, cones if available	Feb 25, 2010		
1/4 pound of	Pinyon pine seed	Feb 25, 2010		
2 seedlings	Welwitschia seedlings with cotyledons	Dec 12, 2009	75	8 - rose pots pumice w/soil at bottom
	Welwitschia, mature plants, seedlings,	Feb 25, 2010		

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

Mar 2, 2010

Quantity	Plant Material	Date planted	Days	Directions
2 plants	Asclepias curassavica flowers	Mar 2, 2010		Enter directions here

	Clematis flowers	Mar 2, 2010		
2	Impatiens w/pollen--yellow and red tubular	Mar 2, 2010		
2	Impatiens, simple pink flower.	Dec 2, 2009	90	4 cuttings
	Tradescantia	Mar 2, 2010		
	Tradescantia flowers w/pollen	Mar 2, 2010		

Lab 18 Angiosperm Reproduction - Embryo Sac And Embryogeny

Mar 4, 2010

Quantity	Plant Material	Date planted	Days	Directions
2 - 6"pots	Capsella bursa-pastoris	Jan 21, 2010	42	2 - 6" pots, cover w/sand
2 - 6"pots	Capsella bursa-pastoris	Jan 7, 2010	56	2 - 6" pots, cover w/sand
2 - 6"pots	Capsella bursa-pastoris	Feb 4, 2010	28	2 - 6" pots, cover w/sand

Lab 19 Angiosperm Reproduction - Fruit And Seeds

Mar 9, 2010

Quantity	Plant Material	Date planted	Days	Directions
	1 cantaloupe	Mar 9, 2010		
	1 eggplant	Mar 9, 2010		
	1 mango	Mar 9, 2010		
	1 papaya	Mar 9, 2010		
	1 pepper	Mar 9, 2010		
	1 pineapple--but a week early	Mar 9, 2010		
	10 oranges	Mar 9, 2010		
	2 avocados	Mar 9, 2010		
	2 cucumbers	Mar 9, 2010		
	2 nectarine or peach	Mar 9, 2010		
	2 pears	Mar 9, 2010		
	2 plums	Mar 9, 2010		
	4 bananas	Mar 9, 2010		
	4 kiwi	Mar 9, 2010		
20-30 seed	A \dot{c} clepias sp. seed with dispersal fibers still	Mar 9, 2010		
	bag of apples	Mar 9, 2010		
?	Broad bean seed, Soak for 24 hours.	Mar 9, 2010		Enter directions here
	cherry tomatoes--bsk	Mar 9, 2010		

	coconut	Mar 9, 2010	
1	Corn ear	Mar 9, 2010	Purchase at store
?	Cotton seed, Soak for 24 hours.	Mar 9, 2010	Enter directions here
2 plants	Cucumber flowers	Mar 9, 2010	Enter directions here
?	Cucumber or melon seed, Soak for 24	Mar 9, 2010	Enter directions here
	dried figs--pkg. Aisle 7	Mar 9, 2010	
	get purchase order not to exceed \$75:	Mar 9, 2010	
	grapes, seeded if possible	Mar 9, 2010	
	green beans--handful	Mar 9, 2010	
	Interesting fruits from Tim & Doug	Mar 9, 2010	FRUITS AND SEEDS
	interesting fruits from Tim:Asclepias, Pop	Mar 9, 2010	
?	Lupine seed, Soak for 24 hours.	Mar 9, 2010	Enter directions here
	mixed nuts (purchased around Christmas)	Mar 9, 2010	
	okra, pickled (mild). Aisle 8	Mar 9, 2010	
?	Pea seed, SOAK FOR 24 HOURS.	Mar 9, 2010	
	peanuts--salted in bag. Aisle 7, Farmtown	Mar 9, 2010	
	pomegranate	Mar 9, 2010	
	raspberries or blackberries--bsk	Mar 9, 2010	
	Seeds: peas, kidney beans, corn radish	Mar 9, 2010	
	Seeds: Barley, Fava, Castor bean,	Mar 9, 2010	FRUITS AND SEEDS
	smoked almonds--can	Mar 9, 2010	
	snow peas--handful	Mar 9, 2010	
	strawberries--bsk	Mar 9, 2010	
	sunflower seeds, salted--bag. Aisle 7	Mar 9, 2010	

Lab 20 Lab Final

Mar 11, 2010

Quantity	Plant Material	Date planted	Days	Directions
	Lab final, no plants requested	Mar 11, 2010		