

PLP5115C: Citrus Pathology

COURSE LECTURE SCHEDULE Fall 2023

Week	Date	Topic	Lecturer
Module I Introductory to citrus pathology			
Week 1	August 28	Overview of citrus pathology course	Killiny
	September 1	Genomics of the Origin and Evolution of <i>Citrus</i>	Gmitter
Week 2	September 4	Holiday	
	September 8	History of major citrus diseases	Killiny
Module II Citrus viral and viroid diseases			
Week 3	September 11	Characteristics of viral and viroid pathogens	Levy
	September 15	Case study 1: Citrus tristeza (<i>Citrus tristeza closterovirus</i>)	Levy
Module III Fungal Diseases and Epidemiology			
Week 4	September 18	Fungal diseases of fruit and foliage	Dewdney
Quiz 1	September 22	Paper discussion	Dewdney
Week 5	September 25	Management of fungal and bacterial diseases	Dewdney
	September 29	Mid-term Exam	
Week 6	October 2	Epidemiology of citrus diseases	Dewdney
	October 6	Homecoming	
Module IV Citrus Bacterial Diseases			
Week 7	October 9	Characteristics of bacterial pathogens (Eubacteria and Mollicutes) Case study 1: Citrus greening (<i>Candidatus Liberibacter asiaticus</i>) Disease development and insect transmission	Killiny
	October 13	<i>Guest Lecture 1: New Approaches to Control Huanglongbing</i>	Batuman
Week 8	October 16	Case study 2: Citrus stubborn (<i>Spiroplasma citri</i>) Case study 3: Citrus variegated chlorosis (<i>Xylella fastidiosa</i>)	Killiny Killiny
	October 20	<i>Guest lecture 2: Nutritional therapy of Huanglongbing</i>	Vashisth
Week 9	October 23	<i>Guest lecture 3: Role of rootstock in citrus tolerance to HLB</i> <i>Antibiotic therapy of HLB</i>	Albrecht Albrecht
Quiz 2	October 27	<i>Guest Lecture 4: The use of particle films and shading to manage citrus diseases.</i>	Vincent
Week 10	October 30	Case study 4: Citrus Canker (<i>Xanthomonas citri</i>)	Wang
	November 3	Term papers discussion	
Module V Citrus Root Pathology			
Week 11	November 6	Case study 1: Phytophthora Diseases. (Foot rot, root rot, brown rot, gummosis, and <i>Phytophthora-Diaprepes</i> (PD) complex) Case study 2: Huanglongbing (<i>Candidatus Liberibacter asiaticus</i>)	Killiny
Quiz 3	November 10	Holiday	
Week 12	November 13	Case study 3: Citrus nematodes	Duncan
Module VI Citrus responses to abiotic and biotic stresses			
	November 17	Metabolic responses to citrus pathogens and their vectors	Killiny
Week 13	November 20	Volatile organic compounds responses to citrus pathogens and their vectors Deciphering the Role of Citrus Metabolites in HLB Symptom Development	Killiny Killiny
Quiz 4	November 24	Holiday	
Module VII Genetic Manipulation for citrus disease resistance			
Week 14	November 27	Virus-induced gene silencing and Expression vectors	Killiny
	December 1	Transgenic plants and CRISPR/Cas system	Dutt
Week 15	December 4	Reading day	
	December 8	Reading day	
	December 11	Final Exam	