

**Plant-Insect interactions readings – Fall 2011**

Sept. 2	<p>Bigger, D.S. and Marvier, M.A. 1998. How different would a world without herbivory be?: A search for generality in ecology. <i>Integrative Biology</i> 1:60-67.</p> <p>Chapters 1 and 2, <i>Insect-Plant Biology</i>. 2005. Schoonhoven, LM., van Loon, JJA., Dicke, M.</p>
Sept. 9	<p>Fraenkel, G. 1959. The raison d'etre of plant secondary substances. <i>Science</i> 129 1466-1470.</p> <p>Cates, R. and Rhoades, D. 1977. Patterns in the production of antiherbivore chemical defenses in pant communities. <i>Biochemical Systematics and Ecology</i>. 5: 185-193.</p> <p>Coley, P. Bryant, J. Chapin, F. 1985. Resource availability and plant antiherbivore defense. <i>Science</i> 230(4728) 895-899</p> <p><b>Kristen and Graham lead discussion</b></p>
Sept 16.	<p>Strauss, S. and Agrawal, A. 1999. The ecology and evolution of plant tolerance to herbivory. <i>TREE</i> 14(5) 179-185.</p> <p>Paige, K. and Whitham, T. 1987. Overcompensation in response to mammalian herbivory. <i>Am Nat.</i> 129: 407-416.</p> <p>Mauricio et al. 1997 Variation in defense strategies in plants: Are resistance and tolerance mutually exclusive? <i>Ecology</i> 78: 1301-1311.</p> <p><b>David and Graham lead discussion</b></p>
Sept. 23	<p>Zangerl AR, Berenbaum MR. 1997. Costs of chemically defending seeds: furanocoumarins and <i>Pastinaca sativa</i>. <i>American Naturalist</i> 147: 599-608.</p> <p>Stowe KA, Marquis RJ. 2011. Costs of defense: correlated responses to divergent selection for foliar glucosinolate content in <i>Brassica rapa</i>. <i>Evolutionary Ecology</i> 25: 763-775.</p> <p><b>Cheryl and Jeremy lead discussion</b></p>
Sept. 30	<p>Ch. 5 Plants as food</p> <p>Després, L. David, J-P, and Gallet, C. 2007. The evolutionary ecology of insect resistance to plant chemicals. <i>TREE</i> 22:298-307.</p> <p><b>Macel 2011</b></p> <p><b>Cheryl and Jenna lead discussion</b></p>
Oct. 7	<p>Fox L.R., Morrow, P.A. 1981. Specialization - species property or local phenomenon? <i>Science</i> 211: 887-893</p> <p>Kelley, S. and Farrell, B. 1998. Is specialization a dead end? The phylogeny of host use in <i>Dendroctonus</i> bark beetles. <i>Ecology</i> 52(6) 1731-1743.</p> <p><b>Jeremy and Carlyn lead discussion</b></p>
Oct. 14	<p>Karban, R. English-Loeb, G. Hougren-Eiztman D. 1997. Mite vaccinations for sustainable management of spider mites in vineyards. <i>Ecological Applications</i>. 7:183-193.</p> <p>Thaler et al. 2010. <i>Ecology</i>. 91:1075-1082.</p> <p><b>Christa leads discussion</b></p>
Oct. 21	<p>Bernays, E and Graham, M. 1988. On the evolution of host specificity in phytophagous arthropods. <i>Ecology</i> 69 (4) 886-892.</p>

	<p>Gómez JM, Zamora R. 1994. Top-down effects in a tritrophic system: parasitoids enhance plant fitness. Ecology 75: 1023-1030.</p> <p>Karban R, English-Loeb G. 1997. Tachinid parasitoids affect host plant choice by caterpillars to increase caterpillar survival. Ecology 78: 603-611. <b>SKIM</b> (e.g. read abstract, study figures, read anything additional as needed to understand main results, and according to your interests)</p> <p><b>Wyatt and Stacy lead discussion</b></p>
Oct. 28	<p>Thaler, J. 1999. Jasmonate-inducible plant defenses cause increased parasitism of herbivores. Nature 399: 686-688</p> <p>Rasmann et al. 2011. Direct and indirect root defenses of milkweed. Journal of Ecology. 99: 16-25.</p> <p><b>Christa and Stacy lead discussion</b></p>
Nov. 4	<p>Stiling, P. and Cornelisson, T. 2007. How does elevated carbon dioxide (CO<sub>2</sub>) affect plant-herbivore interactions? A field experiment and meta-analysis of CO<sub>2</sub>-mediated changes on plant chemistry and herbivore performance. Global Change Biology 13:1823-1842.</p> <p>Pelini et al. 2010 Global Change Biology</p> <p><b>Carlyn and Amanda lead discussion</b></p>
Nov. 11	<p><b>Student chosen paper on forest issues</b></p> <p><b>David and Kristen lead discussion</b></p>
Nov. 18	<p>Bezemer et al. 2003 Oikos</p> <p>Kaplan et al. 2008 Ecology</p> <p><b>Christy and Jenna lead discussion</b></p>
Nov. 25	<p>Thanksgiving Break</p>
Dec. 2	<p>Gehring et al. 1997</p> <p>Hulcr and Dunn 2011w</p> <p><b>Christy and Ruth</b></p>
Dec. 9	<p>Pollination</p> <p><b>Wyatt and Amanda lead discussion</b></p>