

# Readings

## Plant Physiological Ecology

### Spring 2019

**\*\*Please contact Dr. Smith if you have trouble accessing the articles\*\***

**\*\*Note: this file will be updated to account for changes to the schedule\*\***

## **Week of January 21**

*Classical Literature Tuesday - Jan 22*

Chapin FS. 2003. Effects of Plant Traits on Ecosystem and Regional Processes: a Conceptual Framework for Predicting the Consequences of Global Change. *Annals of Botany* 91: 455–463.

<https://academic.oup.com/aob/article/91/4/455/213070>

*Recent Literature Thursday - Jan 24*

Reich PB. 2014. The world-wide ‘fast–slow’ plant economics spectrum: a traits manifesto. *Journal of Ecology* 102: 275–301.

<https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2745.12211>

## **Week of January 28**

*Classical Literature Tuesday - Jan 29*

Von Caemmerer S, Farquhar GD. 1981. Some relationships between the biochemistry of photosynthesis and the gas exchange of leaves. *Planta* 153: 376–387.

<https://link.springer.com/article/10.1007/bf00384257>

*Recent Literature Thursday - Jan 31*

Smith NG, Dukes JS. 2018. Drivers of leaf carbon exchange capacity across biomes at the continental scale. *Ecology* 99: 1610–1620.

<https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/ecy.2370>

## **Week of February 4**

*Classical Literature Tuesday - Feb 5*

Boardman NK. 1977. Comparative photosynthesis of sun and shade plants. *Annual review of plant physiology* 28: 355–377.

<https://www.annualreviews.org/doi/10.1146/annurev.pp.28.060177.002035>

*Recent Literature Thursday - Feb 7*

Niinemets Ü, et al. 2015. A worldwide analysis of within-canopy variations in leaf structural, chemical and physiological traits across plant functional types. *New Phytologist* 205: 973–993.

<https://nph.onlinelibrary.wiley.com/doi/full/10.1111/nph.13096>

## **Week of February 11**

*Classical Literature Tuesday - Feb 12*

Atkin OK and Tjoelker M. 2003. Thermal acclimation and the dynamic response of plant respiration to temperature. *Trends in Plant Science* 8: 343–351.

<https://www.sciencedirect.com/science/article/pii/S1360138503001365>

*Recent Literature Thursday - Feb 14*

Saenz et al. 2018. In situ warming in the Antarctic: effects on growth and photosynthesis in Antarctic vascular plants. *New Phytologist* 218: 1406–1418.

<https://nph.onlinelibrary.wiley.com/doi/full/10.1111/nph.15124>

## **Week of February 18**

### *Classical Literature Tuesday - Feb 19*

Chaves MM, Pereira JS, Maroco J, et al. 2002. How Plants Cope with Water Stress in the Field? Photosynthesis and Growth. *Annals of Botany* 89: 907–916.

<https://academic.oup.com/aob/article/89/7/907/151103>

### *Recent Literature Thursday - Feb 21*

Ismail and Horie. 2017. Genomics, Physiology, and Molecular Breeding Approaches for Improving Salt Tolerance. *Annual Review of Plant Biology* 68: 405 - 434.

<https://www.annualreviews.org/doi/abs/10.1146/annurev-arplant-042916-040936>

## **Week of February 25**

### *Classical Literature Tuesday - Feb 26*

Bazzaz FA. 1990. The response of natural ecosystems to the rising global CO<sub>2</sub> levels. *Annual review of ecology and systematics* 21: 167–196.

<https://www.annualreviews.org/doi/10.1146/annurev.es.21.110190.001123>

### *Recent Literature Thursday - Feb 28*

Ainsworth EA and Long SP. 2005. What have we learned from 15 years of free-air CO<sub>2</sub> enrichment (FACE)? A meta-analytic review of the responses of photosynthesis, canopy properties and plant production to rising CO<sub>2</sub>. *New Phytologist* 165: 351–372

<https://nph.onlinelibrary.wiley.com/doi/10.1111/j.1469-8137.2004.01224.x>

## **Week of March 4**

### *Classical Literature Tuesday - Mar 5*

LeBauer, D. S. and Treseder, K. K. (2008), Nitrogen limitation of net primary productivity in terrestrial ecosystems is globally distributed. *Ecology*, 89: 371-379.

<https://esajournals.onlinelibrary.wiley.com/doi/full/10.1890/06-2057.1>

*Recent Literature Thursday - Mar 7*

Yuan, Z. Y. and Chen, H. Y. (2015). Decoupling of nitrogen and phosphorus in terrestrial plants associated with global changes. *Nature Climate Change*, 5: 465-469.

<https://www-nature-com.lib-e2.lib.ttu.edu/articles/nclimate2549>

## **Week of March 18**

*Classical Literature Tuesday - Mar 19*

Mooney HA. 1972. The carbon balance of plants. *Annual review of ecology and systematics* 3: 315–346.

<https://www.annualreviews.org/doi/10.1146/annurev.es.03.110172.001531>

*Recent Literature Thursday - Mar 21*

Fraterrigo JM, MG Turner, and SM Pearson. (2006). Previous land use alters plant allocation and growth in forest herbs. *Journal of Ecology*, 94: 548-557.

<https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2745.2006.01081.x>

## **Week of April 1**

*Classical Literature Tuesday - Apr 2*

Givnish TJ. 2002. Adaptive significance of evergreen vs. deciduous leaves: solving the triple paradox. *Silva fennica* 36: 703–743.

<https://silvafennica.fi/article/535>

*Recent Literature Thursday - Apr 4*

Wolkovich EM, Cook BI, Allen JM, et al. 2012. Warming experiments underpredict plant phenological responses to climate change. *Nature* 485: 494.

<https://www.nature.com/articles/nature11014>

## **Week of April 8**

*Classical Literature Tuesday - Apr 9*

Grime JP. 1977. Evidence for the Existence of Three Primary Strategies in Plants and Its Relevance to Ecological and Evolutionary Theory. *The American Naturalist* 111: 1169–1194.

<https://www.jstor.org/stable/2460262>

*Recent Literature Thursday - Apr 11*

Wilson, S.D. and Tilman, D. (1993) Plant competition and resource availability in response to disturbance and fertilization. *Ecology* 74: 599–611.

<https://esajournals.onlinelibrary.wiley.com/doi/abs/10.2307/1939319>

## **Week of April 15**

*Classical Literature Tuesday - Apr 16*

Wright DP, Scholes JD, Read DJ. 1998. Effects of VA mycorrhizal colonization on photosynthesis and biomass production of *Trifolium repens* L. *Plant, Cell and Environment* 21: 209–216.

<https://onlinelibrary.wiley.com/doi/10.1046/j.1365-3040.1998.00280.x>

*Recent Literature Thursday - Apr 18*

Frederickson, M.E. et al. (2012) The direct and ecological costs of an ant-plant symbiosis. *Am. Nat.* 179, 768–778

<https://www.journals.uchicago.edu/doi/abs/10.1086/665654>

## **Week of April 22**

*Classical Literature Tuesday - Apr 23*

Aerts R. 1997. Climate, Leaf Litter Chemistry and Leaf Litter Decomposition in Terrestrial Ecosystems: A Triangular Relationship. *Oikos* 79: 439–449.

<https://www.jstor.org/stable/3546886>

*Recent Literature Thursday - Apr 25*

TBD

## **Week of April 29**

*Classical Literature Tuesday - Apr 30*

Field CB, Lobell DB, Peters HA, Chiariello NR. 2007. Feedbacks of Terrestrial Ecosystems to Climate Change. *Annual Review of Environment and Resources* 32: 1–29.

<https://www.annualreviews.org/doi/10.1146/annurev.energy.32.053006.141119>

*Recent Literature Thursday - May 2*

TBD