

# Readings

## Plant Physiological Ecology

### Spring 2021

**\*\*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 25**

*Classical Literature Tuesday - Jan 26*

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 28*

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 February 1**

*Classical Literature Tuesday - Feb 2*

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 - Feb 4*

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 8 and 15**

*Classical Literature Tuesday - Feb 9*

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 18*

Bennie J., Davies T.W., Cruse D. Gaston K.J. 2016. Ecological effects of artificial light at night on wild plants. *Journal of Ecology* 104, 611–620.

<https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2745.12551>

## **Week of February 22**

*Classical Literature Tuesday - Feb 23*

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 25*

Slot, M. and Winter, K. (2017), In situ temperature response of photosynthesis of 42 tree and liana species in the canopy of two Panamanian lowland tropical forests with contrasting rainfall regimes. *New Phytologist* 214: 1103-1117.

<https://nph.onlinelibrary.wiley.com/doi/full/10.1111/nph.14469>

## **Week of March 1**

### *Classical Literature Tuesday - Mar 2*

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 - Mar 4*

Li X., Blackman C.J., Choat B., Duursma R.A., Rymer P.D., Medlyn B.E. Tissue D.T. 2018. Tree hydraulic traits are coordinated and strongly linked to climate-of-origin across a rainfall gradient. *Plant, Cell Environment* 41: 646–660.

<https://onlinelibrary.wiley.com/doi/full/10.1111/pce.13129>

## **Week of March 8**

### *Classical Literature Tuesday - Mar 9*

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 - Mar 11*

Swann A.L.S., Hoffman F.M., Koven C.D. Randerson J.T. (2016) Plant responses to increasing CO<sub>2</sub> reduce estimates of climate impacts on drought severity. *Proceedings of the National Academy of Sciences* 113: 10019–10024.

## **Week of March 15**

### *Classical Literature Tuesday - Mar 16*

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 18*

Delpiano C.A., Prieto I., Loayza A.P., Carvajal D.E. Squeo F.A. (2020) Different responses of leaf and root traits to changes in soil nutrient availability do not converge into a community-level plant economics spectrum. *Plant and Soil* 450: 463–478.

<https://link.springer.com/article/10.1007/s11104-020-04515-2>

## **Week of March 22**

*Classical Literature Tuesday - Mar 23*

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 25*

Collalti A., Ibrom A., Stockmarr A., Cescatti A., Alkama R., Fernández-Martínez M., ... Prentice I.C. (2020) Forest production efficiency increases with growth temperature. *Nature Communications* 11: 5322.

<https://www.nature.com/articles/s41467-020-19187-w>

## **Week of March 29**

*Classical Literature Tuesday - Mar 30*

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 1*

Santini, B.A., Hodgson, J.G., Thompson, K., Wilson, P.J., Band, S.R., Jones, G., Charles, M., Bogaard, A., Palmer, C. and Rees, M., 2017. The triangular seed

mass–leaf area relationship holds for annual plants and is determined by habitat productivity. *Functional Ecology*, 31: 1770-1779. <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2435.12870>

## **Week of April 5**

### *Classical Literature Tuesday - Apr 6*

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 8*

Hale, A.N., Lapointe, L. and Kalisz, S. 2016. Invader disruption of below-ground plant mutualisms reduces carbon acquisition and alters allocation patterns in a native forest herb. *New Phytologist* 209: 542-549. <https://nph.onlinelibrary.wiley.com/doi/full/10.1111/nph.13709>

## **Week of April 12**

### *Classical Literature Tuesday - Apr 13*

Kaschuk G., Kuyper T.W., Leffelaar P.A., Hungria M. Giller K.E. 2009. Are the rates of photosynthesis stimulated by the carbon sink strength of rhizobial and arbuscular mycorrhizal symbioses? *Soil Biology and Biochemistry* 41: 1233–1244.

<https://www.sciencedirect.com/science/article/pii/S0038071709000935>

### *Recent Literature Thursday - Apr 15*

Ziska L.H., Pettis J.S., Edwards J., Hancock J.E., Tomecek M.B., Clark A., ... Polley H.W. 2016. Rising atmospheric CO<sub>2</sub> is reducing the protein concentration of a floral pollen source essential for North American bees. *Proceedings of the Royal Society B: Biological Sciences* 283: 20160414.

<https://royalsocietypublishing.org/doi/10.1098/rspb.2016.0414>

## **Week of April 19**

*Classical Literature Tuesday - Apr 20*

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 - Apr 22*

No reading

## **Week of April 26**

*Classical Literature Tuesday - Apr 27*

No reading

*Recent Literature Thursday - Apr 29*

No reading