

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 CO₂ 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 CO₂ 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 CO₂ 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

Terrer, C., Phillips, R.P., Hungate, B.A. et al. 2021. A trade-off between plant and soil carbon storage under elevated CO₂. *Nature* 591: 599–603.

<https://www.nature.com/articles/s41586-021-03306-8>

Week of April 26

Classical Literature Tuesday - Apr 27

No reading

Recent Literature Thursday - Apr 29

No reading