

# 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 16**

*Classical Literature Tuesday - Jan 17*

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 19*

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 23**

*Classical Literature Tuesday - Jan 24*

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 26*

Wang, Z., Wang, C., Liu, S. (2022). Elevated CO<sub>2</sub> alleviates adverse effects of drought on plant water relations and photosynthesis: A global meta-analysis. *Journal of Ecology*, 110(12), 2836-2849.

<https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2745.13988>

## **Week of January 30**

*Classical Literature Tuesday - Jan 31*

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 2*

Paik I, Huq E. 2019. Plant photoreceptors: Multi-functional sensory proteins and their signaling networks. *Seminars in Cell Developmental Biology* 92, 114–121.

<https://www.sciencedirect.com/science/article/pii/S1084952117305748>

## **Week of February 6**

*Classical Literature Tuesday - Feb 7*

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 9*

Posch BC, Kariyawasam BC, Bramley H, Coast O, Richards RA, Reynolds MP, Trethowan R, Atkin OK. 2019. Exploring high temperature responses of photosynthesis and respiration to improve heat tolerance in wheat. *Journal of Experimental Botany* 70, 5051–5069.

<https://academic.oup.com/jxb/article/70/19/5051/5506706>

## **Week of February 13**

### *Classical Literature Tuesday - Feb 14*

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 16*

Zhao J, Feng H, Xu T, Xiao J, Guerrieri R, Liu S, Wu X, He X, He X. 2021. Physiological and environmental control on ecosystem water use efficiency in response to drought across the northern hemisphere. *Science of The Total Environment* 758, 143599.

<https://www.sciencedirect.com/science/article/pii/S0048969720371308>

## **Week of February 20**

NO CLASS

## **Week of February 27**

### *Classical Literature Tuesday - Feb 28*

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 2*

O'Connor RC, Blumenthal DM, Ocheltree TW, Nippert JB. 2022. Elevated CO<sub>2</sub> counteracts effects of water stress on woody rangeland-encroaching species. *Tree Physiology*, tpac150.

<https://academic.oup.com/treephys/advance-article/doi/10.1093/treephys/tpac150/6966044>

## **Week of March 6**

### *Classical Literature Tuesday - Mar 7*

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 8*

Yu Q, Ni X, Cheng X, Ma S, Tian D, Zhu B, Zhu J, Ji C, Tang Z, Fang J. 2022. Foliar phosphorus allocation and photosynthesis reveal plants' adaptive strategies to phosphorus limitation in tropical forests at different successional stages. *Science of The Total Environment* 846, 157456.

<https://www.sciencedirect.com/science/article/pii/S0048969722045545>

## **Week of March 13**

NO CLASS.

## **Week of March 20**

### *Classical Literature Tuesday - Mar 21*

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 23*

Lee BR, Ibáñez I. 2021. Spring phenological escape is critical for the survival of temperate tree seedlings. *Functional Ecology* 35, 1848–1861.

<https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2435.13821>

## **Week of March 27**

PRESENTATION WEEK. NO READINGS.

## **Week of April 3**

NO CLASS.

## **Week of April 10**

*Classical Literature Tuesday - Apr 11*

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>

## **Week of April 17**

PRESENTATION WEEK. NO READINGS.

## **Week of April 24**

NO CLASS.

## **Week of May 1**

PRESENTATION WEEK. NO READINGS.