BS3190: Climate Change: Plants and the Environment

View Online

1.

Morison, J. I. L. & Morecroft, M. D. Plant Growth and Climate Change. vol. Biological sciences series (Blackwell, 2006).

2.

Morison, J. I. L. & Morecroft, M. D. Plant Growth and Climate Change. vol. Biological sciences series (Blackwell, 2006).

3.

Wang, W., Vinocur, B. & Altman, A. Plant Responses to Drought, Salinity and Extreme Temperatures: Towards Genetic Engineering for Stress Tolerance. Planta **218**, 1–14 (2003).

4.

Bohnert, H. J. Abiotic Stress. in Encyclopedia of Life Sciences (Wiley Interscience, 2007). doi:10.1002/9780470015902.a0020087.

5.

Sreenivasulu, N. Deciphering the Regulatory Mechanisms of Abiotic Stress Tolerance in Plants by Genomic Approaches. Gene **388**, 1–13 (2007).

6.

Midgley, G. F. Plant Physiological Responses to Climate and Environmental Change. in Encyclopedia of Life Sciences (Wiley Interscience, 2017). doi:10.1002/9780470015902.a0003205.pub2.

7.

Smirnoff, N. Plant Stress Physiology. in Encyclopedia of Life Sciences (Wiley Interscience, 2014). doi:10.1002/9780470015902.a0001297.pub2.

8.

Cushman, J. C. & Bohnert, H. J. Genomic Approaches to Plant Stress Tolerance. Current Opinion in Plant Biology **3**, 117–124 (2000).

9.

Mittler, R. Abiotic Stress, the Field Environment and Stress Combination. Trends in Plant Science **11**, 15–19 (2006).

10.

Vinocur, B. & Altman, A. Recent Advances in Engineering Plant Tolerance to Abiotic Stress: Achievements and Limitations. Current Opinion in Biotechnology **16**, 123–132 (2005).

11.

Grover, A., Sahi, C., Sanan, N. & Grover, A. Taming Abiotic Stresses in Plants Through Genetic Engineering: Current Strategies and Perspective. Plant Science **143**, 101–111 (1999).

12.

Ferguson, I. B. The Plant Response: Stress in the Daily Environment. Journal of Zhejiang University-SCIENCE A **5**, 129–132 (2004).

13.

Mahajan, S. & Tuteja, N. Cold, Salinity and Drought Stresses: An Overview. Archives of Biochemistry and Biophysics **444**, 139–158 (2005).

14.

Balbi, V. & Devoto, A. Jasmonate Signalling Network in Arabidopsis Thaliana: Crucial Regulatory Nodes and New Physiological Scenarios. New Phytologist **177**, 301–318 (2007).

15.

Knight, H. & Knight, M. R. Abiotic Stress Signalling Pathways: Specificity and Cross-Talk. Trends in Plant Science **6**, 262–267 (2001).

16.

Singh, K. Transcription Factors in Plant Defense and Stress Responses. Current Opinion in Plant Biology **5**, 430–436 (2002).

17.

Latchman, D. S. Transcription Factors. in Encyclopedia of Life Sciences (Wiley Interscience, 2007). doi:10.1002/9780470015902.a0005278.pub2.

18.

Mahajan, S. & Tuteja, N. Cold, Salinity and Drought Stresses: An Overview. Archives of Biochemistry and Biophysics **444**, 139–158 (2005).

19.

Matys, V. TRANSFAC(R): Transcriptional Regulation, From Patterns to Profiles. Nucleic Acids Research **31**, 374–378 (2003).

20.

Vinocur, B. & Altman, A. Recent Advances in Engineering Plant Tolerance to Abiotic Stress:

Achievements and Limitations. Current Opinion in Biotechnology **16**, 123–132 (2005).

21.

Zhu, J.-K. Salt and Dought Stress Signal Transduction in Plants. Annual Review of Plant Biology **53**, 247–273 (2002).

22.

Bailey-Serres, J. Waterproofing Crops: Effective Flooding Survival Strategies. Plant Physiology **160**, 1698–1709 (2012).

23.

C. Mariano Cossani & Reynolds, M. P. Physiological Traits for Improving Heat Tolerance in Wheat. Plant Physiology **160**, 1710–1718 (2012).

24.

Ort, D. R. & Ainsworth, E. Focus on Climate Change. Plant Physiology **160**, 1675–1676 (2012).

25.

Pirkkala, L. & Sistonen, L. Heat Shock Proteins (HSPs): Structure, Function and Genetics. in Encyclopedia of Life Sciences (Credo Reference, 2006). doi:10.1038/npg.els.0006130.

26.

Camagna, M. & Takemoto, D. Hypersensitive Response in Plants. in Encyclopedia of Life Sciences (Wiley Interscience, 2018). doi:10.1002/9780470015902.a0020103.pub2.

27.

Rietz, S. & Parker, J. E. Plant Disease and Defence. in Encyclopedia of Life Sciences (Wiley Interscience, 2007). doi:10.1002/9780470015902.a0004036.

28.

Corrion, A. & Day, B. Pathogen Resistance Signalling in Plants. in Encyclopedia of Life Sciences (Wiley Interscience, 2015). doi:10.1002/9780470015902.a0020119.pub2.

29.

Xiao, X. & Kachroo, A. Plant Defences Against Fungal Attack: Perception and Signal Transduction. in Encyclopedia of Life Sciences (Wiley Interscience, 2019). doi:10.1002/9780470015902.a0003438.pub3.

30.

Whitney, H. M. & Glover, B. J. Coevolution: Plant-Insect. in Encyclopedia of Life Sciences (Wiley Interscience, 2013). doi:10.1002/9780470015902.a0001762.pub2.

31.

Kessler, A. Plant Defences against Herbivore Attack. in Encyclopedia of Life Sciences (Wiley Interscience, 2017). doi:10.1002/9780470015902.a0001324.pub3.

32.

Zhu, Z., Piao, S. & Myneni, R. B. Greening of the Earth and Its Drivers. Nature Climate Change **6**, 791–795 (2016).

33.

Wullschleger, S. D. & Strahl, M. Climate Change: A Controlled Experiment. Scientific American **302**, 78–83 (2010).

34.

Midgley, G. F. Plant Physiological Responses to Climate and Environmental Change. in Encyclopedia of Life Sciences 1–12 (Wiley Interscience, 2001). doi:10.1002/9780470015902.a0003205.pub2.

35.

Long, S. P. Food for Thought: Lower-Than-Expected Crop Yield Stimulation with Rising CO2 Concentrations. Science **312**, 1918–1921 (2006).

36.

Sykes, M. T. Climate Change Impacts: Vegetation. in Encyclopedia of Life Sciences (Wiley Interscience, 2009). doi:10.1002/9780470015902.a0021227.

37.

NASA: A Year in the Life of Earth's CO2 | YouTube. (2014).

38.

Bonan, G. B. Forests and Climate Change: Forcings, Feedbacks, and the Climate Benefits of Forests. Science **320**, 1444–1449 (2008).

39.

Brienen, R. J. W. Long-Term Decline of the Amazon Carbon Sink. Nature **519**, 344–348 (2015).

40.

Hemp, A. Climate Change-Driven Forest Fires Marginalize the Impact of Ice Cap Wasting on Kilimanjaro. Global Change Biology **11**, 1013–1023 (2005).

41.

Kurz, W. A. et al. Mountain Pine Beetle and Forest Carbon Feedback to Climate Change. Nature **452**, 987–990 (2008).

42.

Hungate, B. A. et al. CO2 Elicits Long-Term Decline in Nitrogen Fixation. Science **304**, 1291–1291 (2004).

43.

Gibbard, S., Caldeira, K., Bala, G., Phillips, T. J. & Wickett, M. Climate Effects of Global Land Cover Change. Geophysical Research Letters **32**, (2005).

44.

Bala, G. et al. Combined Climate and Carbon-Cycle Effects of Large-Scale Deforestation. UNT Digital Library **104**, 6550–6555 (2007).

45.

Naudts, K. et al. Europes Forest Management Did Not Mitigate Climate Warming. Science **351**, 597–600 (2016).

46.

Smetacek, V., Klaas, C., Strass, V. H. & Assmy, P. Deep Carbon Export From a Southern Ocean Iron-Fertilized Diatom Bloom. Nature **487**, 313–319 (2012).

47.

Griscom, B. W., Adams, J., Ellis, P. W. & Houghton, R. A. Natural Climate Solutions. Proceedings of the National Academy of Sciences **114**, 11645–11650 (2017).

48.

Birch, H. Where the Ocean Meets the Sky. 82–88 https://www.chemistryworld.com/feature/where-the-ocean-meets-the-sky/3004890.article (2011).

49.

Poorter, H. & Navas, M.-L. Plant Growth and Competition at Elevated CO2: On Winners,

Losers and Functional Groups. New Phytologist **157**, 175–198 (2003).

50.

Liu, Y. et al. Do Invasive Alien Plants Benefit More From Global Environmental Change Than Native Plants? Global Change Biology **23**, 3363–3370 (2017).

51.

Schwartz, M. D., Ahas, R. & Aasa, A. Onset of Spring Starting Earlier Across the Northern Hemisphere. Global Change Biology **12**, 343–351 (2006).

52.

Menzel, A. & Fabian, P. Growing Season Extended in Europe. Nature **397**, 659–659 (1999).

53.

Fitter, A. H. & Fitter, R. S. R. Rapid Changes in Flowering Time in British Plants. Science **296**, 1689–1691 (2002).

54.

Gange, A. C., Gange, E. G., Sparks, T. H. & Boddy, L. Rapid and Recent Changes in Fungal Fruiting Patterns. Science **316**, 71–71 (2007).

55.

Braschler, B. & Hill, J. K. Role of Larval Host Plants in the Climate-Driven Range Expansion of the Butterfly Polygonia C-Album. Journal of Animal Ecology **76**, 415–423 (2007).

56.

Hickling, R., Roy, D. B., Hill, J. K., Fox, R. & Thomas, C. D. The Distributions of a Wide Range of Taxonomic Groups Are Expanding Polewards. Global Change Biology **12**, 450–455 (2006).

57.

Visser, M. E. & Both, C. Shifts in Phenology Due to Global Climate Change: The Need for a Yardstick. Proceedings: Biological Sciences **272**, 2561–2569 (2005).

58.

Thackeray, S. J., Sparks, T. H., Frederiksen, M. & Burthe, S. Trophic Level Asynchrony in Rates of Phenological Change for Marine, Freshwater and Terrestrial Environments. Global Change Biology **16**, 3304–3313 (2010).

59.

Atkinson, A. et al. Krill (Euphausia Superba) Distribution Contracts Southward During Rapid Regional Warming. Nature Climate Change **9**, 142–147 (2019).

60.

Lenoir, J. & Svenning, J. C. Climate-Related Range Shifts - a Global Multidimensional Synthesis and New Research Directions. Ecography **38**, 15–28 (2015).

61.

Garrett, K. A., Dendy, S. P., Frank, E. E., Rouse, M. N. & Travers, S. E. Climate Change Effects on Plant Disease: Genomes to Ecosystems. Annual Review of Phytopathology **44**, 489–509 (2006).

62.

DeLucia, E. H., Nabity, P. D., Zavala, J. A. & Berenbaum, M. R. Climate Change: Resetting Plant-Insect Interactions. Plant Physiology **160**, 1677–1685 (2012).

63.

Jamieson, M. A., Trowbridge, A. M., Raffa, K. F. & Lindroth, R. L. Consequences of Climate Warming and Altered Precipitation Patterns for Plant-Insect and Multitrophic Interactions. Plant Physiology **160**, 1719–1727 (2012).

64.

Yuan, J. S., Himanen, S. J., Holopainen, J. J., Chen, F. & Stewart Jr., C. N. Smelling Global Climate Change: Mitigation of Function for Plant Volatile Organic Compounds. Trends in Ecology & Evolution **24**, 323–331 (2009).

65.

Welcome to Carbon Atlas | Global Carbon Atlas. http://www.globalcarbonatlas.org/en/content/welcome-carbon-atlas.

66.

Young, H. & Somerville, C. Growing Better Biofuel Crops | The Scientist. http://www.the-scientist.com/?articles.view/articleNo/32264/title/Growing-Better-Biofuel-Crops/ (2012).

67.

Somerville, C. Biofuels. Current Biology **17**, R115–R119 (2007).

68.

Harrabin, R. Biomass May Hinder Climate Fight | BBC News. https://www.bbc.co.uk/news/science-environment-20303668 (2012).

69.

Sucking Up Carbon: Greenhouse Gases Must Be Scrubbed From the Air. The Economist (2017).

70.

Rosling, H. Hans Rosling: Global Population Growth, Box by Box | TED. (2010).

71.

Benton, T. What Will We Eat in 2030? | World Economic Forum. https://www.weforum.org/agenda/2016/11/what-will-we-eat-in-2030?utm_content=bufferf4318&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer (2016).

72.

Fitter, A. People, Plants and Planet. http://www.gatsbyplants.leeds.ac.uk/tree/uploads/Lectures/Fitter_A_SS12/player.html.

73.

Baulcombe, D. Reaping the Benefits. http://www.gatsbyplants.leeds.ac.uk/tree.2.0/view_lecture.php?permalink=MTA0NQ.

74.

Godfray, H. C. J. et al. Food Security: The Challenge of Feeding 9 Billion People. Science **327**, 812–818 (2010).

75.

Ort, D. R., Merchant, S. S., Alric, J. & Berkan, A. Redesigning Photosynthesis to Sustainably Meet Global Food and Bioenergy Demand. Proceedings of the National Academy of Sciences **112**, 8529–8536 (2015).

76.

Farre, G., Twyman, R. M., Zhu, C., Capell, T. & Christou, P. Nutritionally Enhanced Crops and Food Security: Scientific Achievements Versus Political Expediency. Current Opinion in Biotechnology **22**, 245–251 (2011).