

BS3190: Climate Change: Plants and the Environment

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1.
Morison JIL, Morecroft MD. Plant Growth and Climate Change. Oxford: Blackwell; 2006.
2.
Morison JIL, Morecroft MD. Plant Growth and Climate Change [Internet]. Oxford: Blackwell; 2006. Available from:
<http://ezproxy01.rhul.ac.uk/login?url=http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780470994184>
3.
Wang W, Vinocur B, Altman A. Plant Responses to Drought, Salinity and Extreme Temperatures: Towards Genetic Engineering for Stress Tolerance. *Planta*. 2003;218(1):1-14.
4.
Bohnert HJ. Abiotic Stress. *Encyclopedia of Life Sciences* [Internet]. Wiley Interscience; 2007. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0020087>
5.
Sreenivasulu N. Deciphering the Regulatory Mechanisms of Abiotic Stress Tolerance in Plants by Genomic Approaches. *Gene*. 2007;388(1):1-13.
- 6.

Midgley GF. Plant Physiological Responses to Climate and Environmental Change. Encyclopedia of Life Sciences [Internet]. Wiley Interscience; 2017. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0003205.pub2>

7.

Smirnoff N. Plant Stress Physiology. Encyclopedia of Life Sciences [Internet]. Wiley Interscience; 2014. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0001297.pub2>

8.

Cushman JC, Bohnert HJ. Genomic Approaches to Plant Stress Tolerance. Current Opinion in Plant Biology. 2000;3(2):117-124.

9.

Mittler R. Abiotic Stress, the Field Environment and Stress Combination. Trends in Plant Science. 2006;11(1):15-19.

10.

Vinocur B, Altman A. Recent Advances in Engineering Plant Tolerance to Abiotic Stress: Achievements and Limitations. Current Opinion in Biotechnology. 2005;16(2):123-132.

11.

Grover A, Sahi C, Sanan N, Grover A. Taming Abiotic Stresses in Plants Through Genetic Engineering: Current Strategies and Perspective. Plant Science. 1999;143(1):101-111.

12.

Ferguson IB. The Plant Response: Stress in the Daily Environment. Journal of Zhejiang University-SCIENCE A [Internet]. Zhejiang University Press; 2004;5(2):129-132. Available from: <http://link.springer.com/article/10.1007/BF02840912>

13.

Mahajan S, Tuteja N. Cold, Salinity and Drought Stresses: An Overview. Archives of Biochemistry and Biophysics. 2005;444(2):139–158.

14.

Balbi V, Devoto A. Jasmonate Signalling Network in Arabidopsis Thaliana: Crucial Regulatory Nodes and New Physiological Scenarios. New Phytologist. 2007;177(2):301–318.

15.

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

16.

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

17.

Latchman DS. Transcription Factors. Encyclopedia of Life Sciences [Internet]. Wiley Interscience; 2007. Available from:
<http://doi.wiley.com/10.1002/9780470015902.a0005278.pub2>

18.

Mahajan S, Tuteja N. Cold, Salinity and Drought Stresses: An Overview. Archives of Biochemistry and Biophysics. 2005;444(2):139–158.

19.

Matys V. TRANSFAC(R): Transcriptional Regulation, From Patterns to Profiles. Nucleic Acids Research. 2003;31(1):374–378.

20.

Vinocur B, Altman A. Recent Advances in Engineering Plant Tolerance to Abiotic Stress: Achievements and Limitations. *Current Opinion in Biotechnology*. 2005;16(2):123–132.

21.

Zhu JK. Salt and Drought Stress Signal Transduction in Plants. *Annual Review of Plant Biology*. 2002;53(1):247–273.

22.

Bailey-Serres J. Waterproofing Crops: Effective Flooding Survival Strategies. *Plant Physiology* [Internet]. American Society of Plant Biologists (ASPB) American Society of Plant Biologists (ASPB); 2012;160(4):1698–1709. Available from: <https://www.jstor.org/stable/41812018>

23.

C. Mariano Cossani, Reynolds MP. Physiological Traits for Improving Heat Tolerance in Wheat. *Plant Physiology* [Internet]. American Society of Plant Biologists (ASPB) American Society of Plant Biologists (ASPB); 2012;160(4):1710–1718. Available from: <https://www.jstor.org/stable/41812019>

24.

Ort DR, Ainsworth E. Focus on Climate Change. *Plant Physiology* [Internet]. American Society of Plant Biologists (ASPB) American Society of Plant Biologists (ASPB); 2012;160(4):1675–1676. Available from: <https://www.jstor.org/stable/41812015>

25.

Pirkkala L, Sistonen L. Heat Shock Proteins (HSPs): Structure, Function and Genetics. *Encyclopedia of Life Sciences* [Internet]. Credo Reference; 2006. Available from: <https://onlinelibrary.wiley.com/doi/10.1038/npg.els.0006130>

26.

Camagna M, Takemoto D. Hypersensitive Response in Plants. *Encyclopedia of Life Sciences* [Internet]. Wiley Interscience; 2018. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0020103.pub2>

27.

Rietz S, Parker JE. Plant Disease and Defence. Encyclopedia of Life Sciences [Internet]. Wiley Interscience; 2007. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0004036>

28.

Corrion A, Day B. Pathogen Resistance Signalling in Plants. Encyclopedia of Life Sciences [Internet]. Wiley Interscience; 2015. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0020119.pub2>

29.

Xiao X, Kachroo A. Plant Defences Against Fungal Attack: Perception and Signal Transduction. Encyclopedia of Life Sciences [Internet]. Wiley Interscience; 2019. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0003438.pub3>

30.

Whitney HM, Glover BJ. Coevolution: Plant-Insect. Encyclopedia of Life Sciences [Internet]. Wiley Interscience; 2013. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0001762.pub2>

31.

Kessler A. Plant Defences against Herbivore Attack. Encyclopedia of Life Sciences [Internet]. Wiley Interscience; 2017. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0001324.pub3>

32.

Zhu Z, Piao S, Myneni RB. Greening of the Earth and Its Drivers. Nature Climate Change. 2016;6(8):791–795.

33.

Wullschleger SD, Strahl M. Climate Change: A Controlled Experiment. *Scientific American* [Internet]. 2010;302(3):78–83. Available from: <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=47893648&site=ehost-live>

34.

Midgley GF. Plant Physiological Responses to Climate and Environmental Change. *Encyclopedia of Life Sciences* [Internet]. Wiley Interscience; 2001. p. 1–12. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0003205.pub2>

35.

Long SP. Food for Thought: Lower-Than-Expected Crop Yield Stimulation with Rising CO₂ Concentrations. *Science*. 2006;312(5782):1918–1921.

36.

Sykes MT. Climate Change Impacts: Vegetation. *Encyclopedia of Life Sciences* [Internet]. Wiley Interscience; 2009. Available from: <http://doi.wiley.com/10.1002/9780470015902.a0021227>

37.

NASA: A Year in the Life of Earth's CO₂ | YouTube [Internet]. YouTube; 2014. Available from: <https://www.youtube.com/watch?v=x1SgmFa0r04>

38.

Bonan GB. Forests and Climate Change: Forcings, Feedbacks, and the Climate Benefits of Forests. *Science* [Internet]. American Association for the Advancement of Science; 2008;320(5882):1444–1449. Available from: <https://www.jstor.org/stable/20054256>

39.

Brienen RJW. Long-Term Decline of the Amazon Carbon Sink. *Nature*. 2015;519(7543):344–348.

40.

Hemp A. Climate Change-Driven Forest Fires Marginalize the Impact of Ice Cap Wasting on Kilimanjaro. *Global Change Biology*. 2005;11(7):1013–1023.

41.

Kurz WA, Dymond CC, Stinson G, Rampley GJ, Neilson ET, Carroll AL, Ebata T, Safranyik L. Mountain Pine Beetle and Forest Carbon Feedback to Climate Change. *Nature*. 2008;452(7190):987–990.

42.

Hungate BA, Stilling PD, Dijkstra P, Johnson DW, Ketterer ME, Hymus GJ, Hinkle CR, Drake BG. CO₂ Elicits Long-Term Decline in Nitrogen Fixation. *Science* [Internet]. American Association for the Advancement of Science; 2004;304(5675):1291–1291. Available from: <https://www.jstor.org/stable/3837141>

43.

Gibbard S, Caldeira K, Bala G, Phillips TJ, Wickett M. Climate Effects of Global Land Cover Change. *Geophysical Research Letters*. 2005;32(23).

44.

Bala G, Caldeira K, Wickett M, Phillips TJ, Lobell DB, Delire C, Mirin A. Combined Climate and Carbon-Cycle Effects of Large-Scale Deforestation. *UNT Digital Library* [Internet]. 2007;104(16):6550–6555. Available from: <https://digital.library.unt.edu/ark:/67531/metadc884402/>

45.

Naudts K, Chen Y, McGrath MJ, Ryder J, Valade A, Otto J, Luysaert S. Europe's Forest Management Did Not Mitigate Climate Warming. *Science*. 2016;351(6273):597–600.

46.

Smetacek V, Klaas C, Strass VH, Assmy P. Deep Carbon Export From a Southern Ocean Iron-Fertilized Diatom Bloom. *Nature*. 2012;487(7407):313–319.

47.

Griscom BW, Adams J, Ellis PW, Houghton RA. Natural Climate Solutions. *Proceedings of the National Academy of Sciences*. 2017;114(44):11645–11650.

48.

Birch H. Where the Ocean Meets the Sky [Internet]. *Chemistry World*; 2011. p. 82–88. Available from: <https://www.chemistryworld.com/feature/where-the-ocean-meets-the-sky/3004890.article>

49.

Poorter H, Navas ML. Plant Growth and Competition at Elevated CO₂: On Winners, Losers and Functional Groups. *New Phytologist*. 2003;157(2):175–198.

50.

Liu Y, Oduor AMO, Zhang Z, Manea A, Tooth IM, Leishman MR, Xu X, van Kleunen M. Do Invasive Alien Plants Benefit More From Global Environmental Change Than Native Plants? *Global Change Biology*. 2017;23(8):3363–3370.

51.

Schwartz MD, Ahas R, Aasa A. Onset of Spring Starting Earlier Across the Northern Hemisphere. *Global Change Biology*. 2006;12(2):343–351.

52.

Menzel A, Fabian P. Growing Season Extended in Europe. *Nature*. 1999;397(6721):659–659.

53.

Fitter AH, Fitter RSR. Rapid Changes in Flowering Time in British Plants. *Science* [Internet]. American Association for the Advancement of Science; 2002;296(5573):1689–1691.

Available from: <https://www.jstor.org/stable/3076890>

54.

Gange AC, Gange EG, Sparks TH, Boddy L. Rapid and Recent Changes in Fungal Fruiting Patterns. *Science* [Internet]. American Association for the Advancement of Science; 2007;316(5821):71–71. Available from: <https://www.jstor.org/stable/20035949>

55.

Braschler B, Hill JK. Role of Larval Host Plants in the Climate-Driven Range Expansion of the Butterfly *Polygonia C-Album*. *Journal of Animal Ecology*. 2007;76(3):415–423.

56.

Hickling R, Roy DB, Hill JK, Fox R, Thomas CD. The Distributions of a Wide Range of Taxonomic Groups Are Expanding Polewards. *Global Change Biology*. 2006;12(3):450–455.

57.

Visser ME, Both C. Shifts in Phenology Due to Global Climate Change: The Need for a Yardstick. *Proceedings: Biological Sciences* [Internet]. Royal Society; 2005;272(1581):2561–2569. Available from: <https://www.jstor.org/stable/30047868>

58.

Thackeray SJ, Sparks TH, Frederiksen M, Burthe S. Trophic Level Asynchrony in Rates of Phenological Change for Marine, Freshwater and Terrestrial Environments. *Global Change Biology*. 2010;16(12):3304–3313.

59.

Atkinson A, Hill SL, Pakhomov EA, Siegel V, Reiss CS, Loeb VJ, Steinberg DK, Schmidt K, Tarling GA, Gerrish L, Salliey SF. Krill (*Euphausia Superba*) Distribution Contracts Southward During Rapid Regional Warming. *Nature Climate Change*. 2019;9(2):142–147.

60.

Lenoir J, Svenning JC. Climate-Related Range Shifts - a Global Multidimensional Synthesis and New Research Directions. *Ecography*. 2015;38(1):15–28.

61.

Garrett KA, Dendy SP, Frank EE, Rouse MN, Travers SE. Climate Change Effects on Plant Disease: Genomes to Ecosystems. *Annual Review of Phytopathology*. 2006;44(1):489–509.

62.

DeLucia EH, Nability PD, Zavala JA, Berenbaum MR. Climate Change: Resetting Plant-Insect Interactions. *Plant Physiology [Internet]*. American Society of Plant Biologists (ASPB) American Society of Plant Biologists (ASPB); 2012;160(4):1677–1685. Available from: <http://www.jstor.org/stable/41812016>

63.

Jamieson MA, Trowbridge AM, Raffa KF, Lindroth RL. Consequences of Climate Warming and Altered Precipitation Patterns for Plant-Insect and Multitrophic Interactions. *Plant Physiology [Internet]*. American Society of Plant Biologists (ASPB) American Society of Plant Biologists (ASPB); 2012;160(4):1719–1727. Available from: <https://www.jstor.org/stable/41812020>

64.

Yuan JS, Himanen SJ, Holopainen JJ, Chen F, Stewart Jr. CN. Smelling Global Climate Change: Mitigation of Function for Plant Volatile Organic Compounds. *Trends in Ecology & Evolution [Internet]*. 2009;24(6):323–331. Available from: <http://www.sciencedirect.com/science/article/pii/S016953470900086X>

65.

Welcome to Carbon Atlas | Global Carbon Atlas [Internet]. Available from: <http://www.globalcarbonatlas.org/en/content/welcome-carbon-atlas>

66.

Young H, Somerville C. Growing Better Biofuel Crops | The Scientist [Internet]. 2012. Available from: <http://www.the-scientist.com/?articles.view/articleNo/32264/title/Growing-Better-Biofuel-Crops/>

67.

Somerville C. Biofuels. *Current Biology*. 2007;17(4):R115–R119.

68.

Harrabin R. Biomass May Hinder Climate Fight | BBC News [Internet]. BBC News; 2012. Available from: <https://www.bbc.co.uk/news/science-environment-20303668>

69.

Sucking Up Carbon: Greenhouse Gases Must Be Scrubbed From the Air. *The Economist* [Internet]. 2017 Nov 16; Available from: <https://www.economist.com/briefing/2017/11/16/greenhouse-gases-must-be-scrubbed-from-the-air>

70.

Rosling H. Hans Rosling: Global Population Growth, Box by Box | TED [Internet]. 2010. Available from: https://www.ted.com/talks/hans_rosling_on_global_population_growth

71.

Benton T. What Will We Eat in 2030? | World Economic Forum [Internet]. 2016. Available from: 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

72.

Fitter A. People, Plants and Planet [Internet]. Gatsby Plant Science; Available from: http://www.gatsbyplants.leeds.ac.uk/tree/uploads/Lectures/Fitter_A_SS12/player.html

73.

Baulcombe D. Reaping the Benefits [Internet]. Gatsby Plants Lecture; Available from: http://www.gatsbyplants.leeds.ac.uk/tree.2.0/view_lecture.php?permalink=MTA0NQ

74.

Godfray HCJ, Beddington JR, Cute IR, Haddad L, Lawrence D, Muir JF, Pretty J, Robinson S, Thomas SM, Toulmin C. Food Security: The Challenge of Feeding 9 Billion People. *Science* [Internet]. American Association for the Advancement of Science; 2010;327(5967):812–818. Available from: <https://www.jstor.org/stable/40509896>

75.

Ort DR, Merchant SS, Alric J, Berkan A. Redesigning Photosynthesis to Sustainably Meet Global Food and Bioenergy Demand. *Proceedings of the National Academy of Sciences*. 2015;112(28):8529–8536.

76.

Farre G, Twyman RM, Zhu C, Capell T, Christou P. Nutritionally Enhanced Crops and Food Security: Scientific Achievements Versus Political Expediency. *Current Opinion in Biotechnology*. 2011;22(2):245–251.