

# BS3190: Climate Change: Plants and the Environment

View Online



1.

Morison JIL, Morecroft MD. Plant Growth and Climate Change. Vol Biological sciences series. Blackwell; 2006.

2.

Morison JIL, Morecroft MD. Plant Growth and Climate Change. Vol Biological sciences series. Blackwell; 2006.

<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. doi:10.1007/s00425-003-1105-5

4.

Bohnert HJ. 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*. 2007;388(1):1-13. doi:10.1016/j.gene.2006.10.009

6.

Midgley GF. 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 JC, Bohnert HJ. Genomic Approaches to Plant Stress Tolerance. Current Opinion in Plant Biology. 2000;3(2):117-124. doi:10.1016/S1369-5266(99)00052-7

9.

Mittler R. Abiotic Stress, the Field Environment and Stress Combination. Trends in Plant Science. 2006;11(1):15-19. doi:10.1016/j.tplants.2005.11.002

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. doi:10.1016/j.copbio.2005.02.001

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. doi:10.1016/S0168-9452(99)00025-4

12.

Ferguson IB. The Plant Response: Stress in the Daily Environment. Journal of Zhejiang University-SCIENCE A. 2004;5(2):129-132. doi: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. doi:10.1016/j.abb.2005.10.018

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. doi:10.1111/j.1469-8137.2007.02292.x

15.

Knight H, Knight MR. Abiotic Stress Signalling Pathways: Specificity and Cross-Talk. *Trends in Plant Science*. 2001;6(6):262-267. doi:10.1016/S1360-1385(01)01946-X

16.

Singh K. Transcription Factors in Plant Defense and Stress Responses. *Current Opinion in Plant Biology*. 2002;5(5):430-436. doi:10.1016/S1369-5266(02)00289-3

17.

Latchman DS. 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*. 2005;444(2):139-158. doi:10.1016/j.abb.2005.10.018

19.

Matys V. TRANSFAC(R): Transcriptional Regulation, From Patterns to Profiles. *Nucleic Acids Research*. 2003;31(1):374-378. doi:10.1093/nar/gkg108

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. doi:10.1016/j.copbio.2005.02.001

21.

Zhu JK. Salt and Drought Stress Signal Transduction in Plants. *Annual Review of Plant Biology*. 2002;53(1):247-273. doi:10.1146/annurev.arplant.53.091401.143329

22.

Bailey-Serres J. Waterproofing Crops: Effective Flooding Survival Strategies. *Plant Physiology*. 2012;160(4):1698-1709. <https://www.jstor.org/stable/41812018>

23.

C. Mariano Cossani, Reynolds MP. Physiological Traits for Improving Heat Tolerance in Wheat. *Plant Physiology*. 2012;160(4):1710-1718. <https://www.jstor.org/stable/41812019>

24.

Ort DR, Ainsworth E. Focus on Climate Change. *Plant Physiology*. 2012;160(4):1675-1676. <https://www.jstor.org/stable/41812015>

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 JE. 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 HM, Glover BJ. 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 RB. Greening of the Earth and Its Drivers. *Nature Climate Change*. 2016;6(8):791-795. doi:10.1038/nclimate3004

33.

Wullschleger SD, Strahl M. Climate Change: A Controlled Experiment. *Scientific American*. 2010;302(3):78-83.  
<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. In: Encyclopedia of Life Sciences. Wiley Interscience; 2001:1-12.  
doi:10.1002/9780470015902.a0003205.pub2

35.

Long SP. Food for Thought: Lower-Than-Expected Crop Yield Stimulation with Rising CO<sub>2</sub> Concentrations. *Science*. 2006;312(5782):1918-1921. doi:10.1126/science.1114722

36.

Sykes MT. 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 CO<sub>2</sub> | YouTube. Published online 2014.  
<https://www.youtube.com/watch?v=x1SgmFa0r04>

38.

Bonan GB. Forests and Climate Change: Forcings, Feedbacks, and the Climate Benefits of Forests. *Science*. 2008;320(5882):1444-1449. <https://www.jstor.org/stable/20054256>

39.

Brienen RJW. Long-Term Decline of the Amazon Carbon Sink. *Nature*. 2015;519(7543):344-348. doi:10.1038/nature14283

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.  
doi:10.1111/j.1365-2486.2005.00968.x

41.

Kurz WA, Dymond CC, Stinson G, et al. Mountain Pine Beetle and Forest Carbon Feedback to Climate Change. *Nature*. 2008;452(7190):987-990. doi:10.1038/nature06777

42.

Hungate BA, Stilling PD, Dijkstra P, et al. CO<sub>2</sub> Elicits Long-Term Decline in Nitrogen Fixation. *Science*. 2004;304(5675):1291-1291. <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). doi:10.1029/2005GL024550

44.

Bala G, Caldeira K, Wickett M, et al. Combined Climate and Carbon-Cycle Effects of Large-Scale Deforestation. *UNT Digital Library*. 2007;104(16):6550-6555. doi:10.1073/pnas.0608998104

45.

Naudts K, Chen Y, McGrath MJ, et al. Europe's Forest Management Did Not Mitigate Climate Warming. *Science*. 2016;351(6273):597-600. doi:10.1126/science.aad7270

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. doi:10.1038/nature11229

47.

Griscom BW, Adams J, Ellis PW, Houghton RA. Natural Climate Solutions. *Proceedings of the National Academy of Sciences*. 2017;114(44):11645-11650. doi:10.1073/pnas.1710465114

48.

Birch H. Where the Ocean Meets the Sky. Published 2011.  
<https://www.chemistryworld.com/feature/where-the-ocean-meets-the-sky/3004890.article>

49.

Poorter H, Navas ML. Plant Growth and Competition at Elevated CO<sub>2</sub>: On Winners, Losers and Functional Groups. *New Phytologist*. 2003;157(2):175-198.  
doi:10.1046/j.1469-8137.2003.00680.x

50.

Liu Y, Oduor AMO, Zhang Z, et al. Do Invasive Alien Plants Benefit More From Global Environmental Change Than Native Plants? *Global Change Biology*. 2017;23(8):3363-3370.  
doi:10.1111/gcb.13579

51.

Schwartz MD, Ahas R, Aasa A. Onset of Spring Starting Earlier Across the Northern Hemisphere. *Global Change Biology*. 2006;12(2):343-351.  
doi:10.1111/j.1365-2486.2005.01097.x

52.

Menzel A, Fabian P. Growing Season Extended in Europe. *Nature*. 1999;397(6721):659-659. doi:10.1038/17709

53.

Fitter AH, Fitter RSR. Rapid Changes in Flowering Time in British Plants. *Science*. 2002;296(5573):1689-1691. <https://www.jstor.org/stable/3076890>

54.

Gange AC, Gange EG, Sparks TH, Boddy L. Rapid and Recent Changes in Fungal Fruiting Patterns. *Science*. 2007;316(5821):71-71. <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. doi:10.1111/j.1365-2656.2007.01217.x

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. doi:10.1111/j.1365-2486.2006.01116.x

57.

Visser ME, Both C. Shifts in Phenology Due to Global Climate Change: The Need for a Yardstick. *Proceedings: Biological Sciences*. 2005;272(1581):2561-2569. <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. doi:10.1111/j.1365-2486.2010.02165.x

59.

Atkinson A, Hill SL, Pakhomov EA, et al. Krill (*Euphausia Superba*) Distribution Contracts Southward During Rapid Regional Warming. *Nature Climate Change*. 2019;9(2):142-147. doi:10.1038/s41558-018-0370-z

60.

Lenoir J, Svenning JC. Climate-Related Range Shifts - a Global Multidimensional Synthesis and New Research Directions. *Ecography*. 2015;38(1):15-28. doi:10.1111/ecog.00967

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.

doi:10.1146/annurev.phyto.44.070505.143420

62.

DeLucia EH, Nability PD, Zavala JA, Berenbaum MR. Climate Change: Resetting Plant-Insect Interactions. *Plant Physiology*. 2012;160(4):1677-1685.  
<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*. 2012;160(4):1719-1727. <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*. 2009;24(6):323-331.  
<http://www.sciencedirect.com/science/article/pii/S016953470900086X>

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*. Published 1 July 2012.  
<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.  
doi:10.1016/j.cub.2007.01.010

68.

Harrabin R. Biomass May Hinder Climate Fight | BBC News. Published 12 November 2012. <https://www.bbc.co.uk/news/science-environment-20303668>

69.

Sucking Up Carbon: Greenhouse Gases Must Be Scrubbed From the Air. The Economist. Published online 16 November 2017. <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. Published online 2010. [https://www.ted.com/talks/hans\\_rosling\\_on\\_global\\_population\\_growth](https://www.ted.com/talks/hans_rosling_on_global_population_growth)

71.

Benton T. What Will We Eat in 2030? | World Economic Forum. Published 10 November 2016. [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](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. [http://www.gatsbyplants.leeds.ac.uk/tree/uploads/Lectures/Fitter\\_A\\_SS12/player.html](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](http://www.gatsbyplants.leeds.ac.uk/tree.2.0/view_lecture.php?permalink=MTA0NQ)

74.

Godfray HCJ, Beddington JR, Cute IR, et al. Food Security: The Challenge of Feeding 9 Billion People. Science. 2010;327(5967):812-818. <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. doi:10.1073/pnas.1424031112

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. doi:10.1016/j.copbio.2010.11.002