BS3190: Climate Change: Plants and the Environment

View Online

[1]

Atkinson, A. et al. 2019. Krill (Euphausia Superba) Distribution Contracts Southward During Rapid Regional Warming. Nature Climate Change. 9, 2 (2019), 142–147. DOI:https://doi.org/10.1038/s41558-018-0370-z.

[2]

Bailey-Serres, J. 2012. Waterproofing Crops: Effective Flooding Survival Strategies. Plant Physiology. 160, 4 (2012), 1698–1709.

[3]

Bala, G. et al. 2007. Combined Climate and Carbon-Cycle Effects of Large-Scale Deforestation. UNT Digital Library. 104, 16 (2007), 6550–6555. DOI:https://doi.org/10.1073pnas.0608998104.

[4]

Balbi, V. and Devoto, A. 2007. Jasmonate Signalling Network in Arabidopsis Thaliana: Crucial Regulatory Nodes and New Physiological Scenarios. New Phytologist. 177, 2 (2007), 301–318. DOI:https://doi.org/10.1111/j.1469-8137.2007.02292.x.

[5]

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

[6]

Bohnert, H.J. 2007. Abiotic Stress. Encyclopedia of Life Sciences. Wiley Interscience.

[7]

Bonan, G.B. 2008. Forests and Climate Change: Forcings, Feedbacks, and the Climate Benefits of Forests. Science. 320, 5882 (2008), 1444–1449.

[8]

Braschler, B. and Hill, J.K. 2007. Role of Larval Host Plants in the Climate-Driven Range Expansion of the Butterfly Polygonia C-Album. Journal of Animal Ecology. 76, 3 (2007), 415–423. DOI:https://doi.org/10.1111/j.1365-2656.2007.01217.x.

[9]

Brienen, R.J.W. 2015. Long-Term Decline of the Amazon Carbon Sink. Nature. 519, 7543 (2015), 344–348. DOI:https://doi.org/10.1038/nature14283.

[10]

C. Mariano Cossani and Reynolds, M.P. 2012. Physiological Traits for Improving Heat Tolerance in Wheat. Plant Physiology. 160, 4 (2012), 1710–1718.

[11]

Camagna, M. and Takemoto, D. 2018. Hypersensitive Response in Plants. Encyclopedia of Life Sciences. Wiley Interscience.

[12]

Corrion, A. and Day, B. 2015. Pathogen Resistance Signalling in Plants. Encyclopedia of Life Sciences. Wiley Interscience.

[13]

Cushman, J.C. and Bohnert, H.J. 2000. Genomic Approaches to Plant Stress Tolerance. Current Opinion in Plant Biology. 3, 2 (2000), 117–124. DOI:https://doi.org/10.1016/S1369-5266(99)00052-7.

[14]

DeLucia, E.H. et al. 2012. Climate Change: Resetting Plant-Insect Interactions. Plant Physiology. 160, 4 (2012), 1677–1685.

[15]

Farre, G. et al. 2011. Nutritionally Enhanced Crops and Food Security: Scientific Achievements Versus Political Expediency. Current Opinion in Biotechnology. 22, 2 (2011), 245–251. DOI:https://doi.org/10.1016/j.copbio.2010.11.002.

[16]

Ferguson, I.B. 2004. The Plant Response: Stress in the Daily Environment. Journal of Zhejiang University-SCIENCE A. 5, 2 (2004), 129–132. DOI:https://doi.org/10.1007/BF02840912.

[17]

Fitter, A.H. and Fitter, R.S.R. 2002. Rapid Changes in Flowering Time in British Plants. Science. 296, 5573 (2002), 1689–1691.

[18]

Gange, A.C. et al. 2007. Rapid and Recent Changes in Fungal Fruiting Patterns. Science. 316, 5821 (2007), 71–71.

[19]

Garrett, K.A. et al. 2006. Climate Change Effects on Plant Disease: Genomes to Ecosystems. Annual Review of Phytopathology. 44, 1 (2006), 489–509. DOI:https://doi.org/10.1146/annurev.phyto.44.070505.143420.

[20]

Gibbard, S. et al. 2005. Climate Effects of Global Land Cover Change. Geophysical Research Letters. 32, 23 (2005). DOI:https://doi.org/10.1029/2005GL024550.

[21]

Godfray, H.C.J. et al. 2010. Food Security: The Challenge of Feeding 9 Billion People. Science. 327, 5967 (2010), 812–818.

[22]

Griscom, B.W. et al. 2017. Natural Climate Solutions. Proceedings of the National Academy of Sciences. 114, 44 (2017), 11645–11650. DOI:https://doi.org/10.1073/pnas.1710465114.

[23]

Grover, A. et al. 1999. Taming Abiotic Stresses in Plants Through Genetic Engineering: Current Strategies and Perspective. Plant Science. 143, 1 (1999), 101–111. DOI:https://doi.org/10.1016/S0168-9452(99)00025-4.

[24]

Growing Better Biofuel Crops | The Scientist: 2012. http://www.the-scientist.com/?articles.view/articleNo/32264/title/Growing-Better-Biofuel-Crops/.

[25]

Hemp, A. 2005. Climate Change-Driven Forest Fires Marginalize the Impact of Ice Cap Wasting on Kilimanjaro. Global Change Biology. 11, 7 (2005), 1013–1023. DOI:https://doi.org/10.1111/j.1365-2486.2005.00968.x.

[26]

Hickling, R. et al. 2006. The Distributions of a Wide Range of Taxonomic Groups Are Expanding Polewards. Global Change Biology. 12, 3 (2006), 450–455. DOI:https://doi.org/10.1111/j.1365-2486.2006.01116.x.

[27]

Hungate, B.A. et al. 2004. CO2 Elicits Long-Term Decline in Nitrogen Fixation. Science. 304, 5675 (2004), 1291–1291.

[28]

Jamieson, M.A. et al. 2012. Consequences of Climate Warming and Altered Precipitation Patterns for Plant-Insect and Multitrophic Interactions. Plant Physiology. 160, 4 (2012), 1719–1727.

[29]

Kessler, A. 2017. Plant Defences against Herbivore Attack. Encyclopedia of Life Sciences. Wiley Interscience.

[30]

Knight, H. and Knight, M.R. 2001. Abiotic Stress Signalling Pathways: Specificity and Cross-Talk. Trends in Plant Science. 6, 6 (2001), 262–267. DOI:https://doi.org/10.1016/S1360-1385(01)01946-X.

[31]

Kurz, W.A. et al. 2008. Mountain Pine Beetle and Forest Carbon Feedback to Climate Change. Nature. 452, 7190 (2008), 987–990. DOI:https://doi.org/10.1038/nature06777.

[32]

Latchman, D.S. 2007. Transcription Factors. Encyclopedia of Life Sciences. Wiley Interscience.

[33]

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

[34]

Liu, Y. et al. 2017. Do Invasive Alien Plants Benefit More From Global Environmental Change Than Native Plants? Global Change Biology. 23, 8 (2017), 3363–3370. DOI:https://doi.org/10.1111/gcb.13579.

[35]

Long, S.P. 2006. Food for Thought: Lower-Than-Expected Crop Yield Stimulation with Rising CO2 Concentrations. Science. 312, 5782 (2006), 1918–1921. DOI:https://doi.org/10.1126/science.1114722.

[36]

Mahajan, S. and Tuteja, N. 2005. Cold, Salinity and Drought Stresses: An Overview. Archives of Biochemistry and Biophysics. 444, 2 (2005), 139–158. DOI:https://doi.org/10.1016/j.abb.2005.10.018.

[37]

Mahajan, S. and Tuteja, N. 2005. Cold, Salinity and Drought Stresses: An Overview. Archives of Biochemistry and Biophysics. 444, 2 (2005), 139–158. DOI:https://doi.org/10.1016/j.abb.2005.10.018.

[38]

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

[39]

Menzel, A. and Fabian, P. 1999. Growing Season Extended in Europe. Nature. 397, 6721 (1999), 659–659. DOI:https://doi.org/10.1038/17709.

[40]

Midgley, G.F. 2017. Plant Physiological Responses to Climate and Environmental Change. Encyclopedia of Life Sciences. Wiley Interscience.

[41]

Midgley, G.F. 2001. Plant Physiological Responses to Climate and Environmental Change. Encyclopedia of Life Sciences. Wiley Interscience. 1–12.

[42]

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

[43]

Morison, J.I.L. and Morecroft, M.D. 2006. Plant Growth and Climate Change. Blackwell.

[44]

Morison, J.I.L. and Morecroft, M.D. 2006. Plant Growth and Climate Change. Blackwell.

[45]

Naudts, K. et al. 2016. Europes Forest Management Did Not Mitigate Climate Warming. Science. 351, 6273 (2016), 597–600. DOI:https://doi.org/10.1126/science.aad7270.

[46]

Ort, D.R. et al. 2015. Redesigning Photosynthesis to Sustainably Meet Global Food and Bioenergy Demand. Proceedings of the National Academy of Sciences. 112, 28 (2015), 8529–8536. DOI:https://doi.org/10.1073/pnas.1424031112.

[47]

Ort, D.R. and Ainsworth, E. 2012. Focus on Climate Change. Plant Physiology. 160, 4 (2012), 1675–1676.

[48]

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

[49]

Pirkkala, L. and Sistonen, L. 2006. Heat Shock Proteins (HSPs): Structure, Function and Genetics. Encyclopedia of Life Sciences. Credo Reference.

[50]

Poorter, H. and Navas, M.-L. 2003. Plant Growth and Competition at Elevated CO2: On Winners, Losers and Functional Groups. New Phytologist. 157, 2 (2003), 175–198. DOI:https://doi.org/10.1046/j.1469-8137.2003.00680.x.

[51]

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

[52]

Rietz, S. and Parker, J.E. 2007. Plant Disease and Defence. Encyclopedia of Life Sciences. Wiley Interscience.

[53]

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

[54]

Schwartz, M.D. et al. 2006. Onset of Spring Starting Earlier Across the Northern Hemisphere. Global Change Biology. 12, 2 (2006), 343–351. DOI:https://doi.org/10.1111/j.1365-2486.2005.01097.x.

[55]

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

[56]

Smetacek, V. et al. 2012. Deep Carbon Export From a Southern Ocean Iron-Fertilized Diatom Bloom. Nature. 487, 7407 (2012), 313–319. DOI:https://doi.org/10.1038/nature11229.

[57]

Smirnoff, N. 2014. Plant Stress Physiology. Encyclopedia of Life Sciences. Wiley Interscience.

[58]

Somerville, C. 2007. Biofuels. Current Biology. 17, 4 (2007), R115–R119. DOI:https://doi.org/10.1016/j.cub.2007.01.010.

[59]

Sreenivasulu, N. 2007. Deciphering the Regulatory Mechanisms of Abiotic Stress Tolerance in Plants by Genomic Approaches. Gene. 388, 1 (2007), 1–13. DOI:https://doi.org/10.1016/j.gene.2006.10.009.

[60]

Sykes, M.T. 2009. Climate Change Impacts: Vegetation. Encyclopedia of Life Sciences. Wiley Interscience.

[61]

Thackeray, S.J. et al. 2010. Trophic Level Asynchrony in Rates of Phenological Change for Marine, Freshwater and Terrestrial Environments. Global Change Biology. 16, 12 (2010), 3304–3313. DOI:https://doi.org/10.1111/j.1365-2486.2010.02165.x.

[62]

Vinocur, B. and Altman, A. 2005. Recent Advances in Engineering Plant Tolerance to Abiotic Stress: Achievements and Limitations. Current Opinion in Biotechnology. 16, 2 (2005), 123–132. DOI:https://doi.org/10.1016/j.copbio.2005.02.001.

[63]

Vinocur, B. and Altman, A. 2005. Recent Advances in Engineering Plant Tolerance to Abiotic Stress: Achievements and Limitations. Current Opinion in Biotechnology. 16, 2 (2005), 123–132. DOI:https://doi.org/10.1016/j.copbio.2005.02.001.

[64]

Visser, M.E. and Both, C. 2005. Shifts in Phenology Due to Global Climate Change: The Need for a Yardstick. Proceedings: Biological Sciences. 272, 1581 (2005), 2561–2569.

[65]

Wang, W. et al. 2003. Plant Responses to Drought, Salinity and Extreme Temperatures: Towards Genetic Engineering for Stress Tolerance. Planta. 218, 1 (2003), 1–14. DOI:https://doi.org/10.1007/s00425-003-1105-5.

[66]

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

[67]

What Will We Eat in 2030? | World Economic Forum: 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.

[68]

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

[69]

Whitney, H.M. and Glover, B.J. 2013. Coevolution: Plant-Insect. Encyclopedia of Life Sciences. Wiley Interscience.

[70]

Wullschleger, S.D. and Strahl, M. 2010. Climate Change: A Controlled Experiment. Scientific American. 302, 3 (2010), 78–83.

[71]

Xiao, X. and Kachroo, A. 2019. Plant Defences Against Fungal Attack: Perception and Signal Transduction. Encyclopedia of Life Sciences. Wiley Interscience.

[72]

Yuan, J.S. et al. 2009. Smelling Global Climate Change: Mitigation of Function for Plant Volatile Organic Compounds. Trends in Ecology & Evolution. 24, 6 (2009), 323–331.

[73]

Zhu, J.-K. 2002. Salt and Dought Stress Signal Transduction in Plants. Annual Review of Plant Biology. 53, 1 (2002), 247–273. DOI:https://doi.org/10.1146/annurev.arplant.53.091401.143329.

[74]

Zhu, Z. et al. 2016. Greening of the Earth and Its Drivers. Nature Climate Change. 6, 8 (2016), 791–795. DOI:https://doi.org/10.1038/nclimate3004.

[75]

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

[76]

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