

**Preliminary Literature list**  
**Horticultural Systems and Future Challenges, BI1309**  
**2021**

**General book for the course:**

**Science and the Garden: The Scientific Basis of Horticultural Practice**  
**Ingram, Vince-Prue & Gregory, 392 pages, 3<sup>rd</sup> edition. 2015.**  
**Wiley-Blackwell**  
**ISBN: 9781118778432**

**Week 1 (BT)**

Harvesting the Sun PDF

(ISHS Scripta Horticulturae 14 [www.harvestingthesun.org](http://www.harvestingthesun.org) )

**Week 2 (BT)**

Horticultural Production Systems - CABI.org Chapter 3. PDF.

(<https://www.cabi.org/Uploads/CABI/.../Chapter%203.pdf>)

Bommarco, R., Kleijn, D. & Potts, S.G. Ecological intensification: harnessing ecosystem services for food security. 2013. Trends in ecology and evolution. 28:4, 230-238.

<https://www.sciencedirect.com/science/article/pii/S016953471200273X>

Wilson, M.H. & Lovell, S.T. 2016. Agroforestry—The Next Step in Sustainable and Resilient Agriculture. Sustainability. 8:6. 574. 15pp.

<http://www.mdpi.com/2071-1050/8/6/574/htm>

**Week 3 (VF)**

Ladaniya M.S.. 2015. Climate Change Effects on Fruit Quality and Post-harvest Management Practices. *In* Climate Dynamics in Horticultural Science. Vol. 1, Principles and Applications. Apple Academic Press, Inc.,

*Read primarily the chapter by Ladaniya, but other chapters in this book can also be relevant for the Fact sheets.*

*The book is available as a pdf through Researchgate: Use Google Scholar and search for "CLIMATE DYNAMICS IN HORTICULTURAL SCIENCE" and you will find the individual chapters, leading to the book.*

Bisbis M.B., Gruda N., Blanke M. 2018. Potential impacts of climate change on vegetable production and product quality A review. Journal of Cleaner Production 170, 1602-1620,.

<https://www.sciencedirect.com/science/article/pii/S0963996909003305>

Chen S., Chen X., Xu J. 2016. Impacts of climate change on agriculture: Evidence from China. J. Environ. Econ. Management, 76, 105–124.

<https://www.sciencedirect.com/science/article/pii/S0095069615000066>

Albrech C. 2011. Invasive Species and Climate Change in California. California Department of Food and Agriculture. Forum on Extreme Climate Risks and California's Future Agriculture and The Food System.

[https://www.cdfa.ca.gov/State\\_Board/pdfs/Courtney\\_Albrecht.pdf](https://www.cdfa.ca.gov/State_Board/pdfs/Courtney_Albrecht.pdf)

California's most significant droughts: Comparing historical and recent conditions. State of California. California Department of Water Resources, 2015.

[https://www.water.ca.gov/LegacyFiles/waterconditions/docs/California\\_Significant\\_Droughts\\_2015\\_small.pdf](https://www.water.ca.gov/LegacyFiles/waterconditions/docs/California_Significant_Droughts_2015_small.pdf)

*Read "Executive Summary" (page 0) + chapter 1 (pages 1-3, left + figure p. 4 + p.5 from Defining drought + p.6) + chapter 2 (p.23-26, 31-33)*

Wildfire is coming. Are you ready to go. Wildfire evacuation guide. California Department of Forestry and Fire Protection (CAL FIRE), 2018.

[http://www.readyforwildfire.org/docs/files/File/calfire\\_go\\_brochure\\_LINOWeb.pdf](http://www.readyforwildfire.org/docs/files/File/calfire_go_brochure_LINOWeb.pdf)

*Read this synoptically (översiktligt).*

Top 20 Most Destructive California Wildfires. California Department of Forestry and Fire Protection (CAL FIRE), 2018.

[http://www.fire.ca.gov/communications/downloads/fact\\_sheets/Top20\\_Destruction.pdf](http://www.fire.ca.gov/communications/downloads/fact_sheets/Top20_Destruction.pdf)

*Read this synoptically to get a view of extent and causes.*

CNN, 2018-06-26. At least 10,500 acres burned by wildfires in Northern California.

<https://edition.cnn.com/2018/06/25/us/pawnee-fire-california/index.html>

*Read this synoptically.*

#### **Week 4 (VF)**

Korhonen J., Honkasalo A., Seppälä J. 2018. Circular Economy: The Concept and its Limitations. *Ecological Economics* 143, 37–46.

<https://www.sciencedirect.com/science/article/pii/S0921800916300325>

Hetemäki L., et al. 2017. Introduction: The need for a circular bioeconomy. *In 'Leading the way to a European circular bioeconomy strategy. From Science to Policy 5.'* European Forest Institute.

<https://pdfs.semanticscholar.org/b35f/31e1a085a06380fcae3e196fa14ea071eeb0.pdf>

*Read page 10-16 (general introduction to bioeconomy).*

Lin C.S.K. et al. 2013. Food waste as a valuable resource for the production of chemicals, materials and fuels. Current situation and global perspective. *Energy Environ. Sci.*, 6, 426-464.

<http://pubs.rsc.org/-/content/articlehtml/2013/ee/c2ee23440h>

Imbert E. 2017. Food waste valorization options: opportunities from the bioeconomy. *Open Agriculture*. 2: 195–204.

<https://www.degruyter.com/view/j/opag.2017.2.issue-1/opag-2017-0020/opag-2017-0020.xml>

D'Hondt K., Jiménez-Sánchez G., Philp J. 2015. Reconciling Food and Industrial Needs for an Asian Bioeconomy: The Enabling Power of Genomics and Biotechnology. *Asian Biotechnology and Development Review*, 17, 2, 85-130.

[https://www.researchgate.net/profile/Jim\\_Philp/publication/282132995\\_Reconciling\\_Food\\_and\\_Industrial\\_Needs\\_for\\_an\\_Asian\\_Bioeconomy\\_The\\_Enabling\\_Power\\_of\\_Genomics\\_and\\_Biotechnology/links/560428ef08aea25fce30b9db.pdf](https://www.researchgate.net/profile/Jim_Philp/publication/282132995_Reconciling_Food_and_Industrial_Needs_for_an_Asian_Bioeconomy_The_Enabling_Power_of_Genomics_and_Biotechnology/links/560428ef08aea25fce30b9db.pdf)

Hartikainen, H. 2017. Food losses and waste in primary production: Case studies on carrots, onions, peas, cereals and farmed fish. Copenhagen: Nordisk Ministerråd.

<http://norden.diva-portal.org/smash/get/diva2:1076202/FULLTEXT01.pdf>

*Read page 13-68 synoptically (which are the biggest causes for the losses?).*

- The Value of Native Plants and Local Production in an Era of Global Agriculture, Shelef et al. 2017
- International New Crop Development Incentives, Barriers, Processes and Progress: An Australian Perspective, Fletcher et al. 2002
- Conventional Banana and plantain breeding, Ortiz 2013
- Diversifying food systems in the pursuit of sustainable food production and healthy diets, Dwivedi et al. 2017
- Diversifying the intensive cereal cropping systems of the indo-ganges through horticulture, Jat et al. 2006
- From crossbreeding to biotechnology-facilitated improvement of banana and plantain, Ortiz and Swennen 2014
- Pros and Cons of Japanese Quince (*Chaenomeles japonica*) – an Underutilized Pome Fruit, Rumpunen et al. 2011

#### **Week 5 (VSB)**

To be decided later

#### **Week 6 (VSB)**

To be decided later

#### **Week 7 (AEM)**

To be decided later

#### **Week 8 (LAPF/BT)**

To be decided later

#### **Week 9 (BT)**

To be decided later