

## Course literature

### BI1339 – Experimental approaches in plant growth analysis and phenotyping, 15 hp, autumn 2020

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The main course literature will be Lambers H, Chapin FS III, Pons TL (2008), *Plant Physiological Ecology*, Springer. An online version of this book is available from the SLU library at <https://link.springer.com/book/10.1007%2F978-0-387-78341-3>

In the (project) tools, “Basic Statistics” section, the course literature will be the text book: Fowler J, Cohen L, Jarvis P (1998) *Practical Statistics for Field Biology*, 2<sup>nd</sup> edition. This book is available at the SLU Library (8 copies).

Reference will be made to specific chapters of the main course literature by the teachers responsible for each teaching unit, through the course Canvas page.

In addition to the above course literature, other sources will be part of the course literature. In some cases, supporting (more basic) readings and additional (more advanced) readings will be listed (and clearly indicated) at the course Canvas page. **All compulsory literature will be made available to the students enrolled through the course Canvas page.**

The additional course literature includes the following titles (selection):

Araus JL, Kefauver SC (2018) *Breeding to adapt agriculture to climate change: affordable phenotyping solutions*. *Current Opinion in Plant Biology* 45, 237-247.

Chawade A, Van Ham J, Blomquist H, Bagge O, Alexandersson E, Ortiz R (2019) *High-Throughput Field-Phenotyping Tools for Plant Breeding and Precision Agriculture*. *Agronomy* 2019, 9, 258.

Connolly J, Wayne P, Bazzaz FA (2001) *Interspecific Competition in Plants: How Well Do Current Methods Answer Fundamental Questions?* *The American Naturalist* 157: 107-125.

Fiorani F, Schurr U (2013) *Future Scenarios for Plant Phenotyping*. *Annual Review of Plant Biology* 64:1, 267-291.

Fowler J, Cohen L, Jarvis P (1998) *Practical Statistics for Field Biology*. Wiley.

Golzarian M, Frick R, Rajendran K, Berger B, Roy S, et al. 2011. *Accurate inference of shoot biomass from high-throughput images of cereal plants*. *Plant Methods* 7:2

Larcher W (2003) *Physiological Plant Ecology*, Springer, p. 111-119.

Poorter H, Niinemets Ü, Walter A, Fiorani F, Schurr U. 2010. *A method to construct dose-response curves for a wide range of environmental factors and plant traits by means of a meta-analysis of phenotypic data*. *J. Exp. Bot.* 61:2043–55

Weih M, Westerbergh A, Lundquist P-O (2017), *Role of nutrient-efficient plants for improving crop yields: bridging plant ecology, physiology, and molecular biology*, Hossain MA et al (Eds), *Plant macronutrient use efficiency – Molecular and genomic perspectives in crop plants*, Elsevier, p. 31-44.

**Please note that all compulsory literature will be made available to the students enrolled through the course Canvas page.**