

# Designing Experiments

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This article is very much under construction, but check out

- the old version of this chapter [here](#)
- the packages `{FielDHub}` and `{agricolae}`
- these publications:
  - Casler (2015)
  - H. P. Piepho, Büchse, and Emrich (2003)
  - H. P. Piepho, Büchse, and Richter (2004)
  - Hans-Peter Piepho et al. (2022)

Casler, Michael D. 2015. “Fundamentals of Experimental Design: Guidelines for Designing Successful Experiments.” *Agronomy Journal* 107 (2): 692–705. <https://doi.org/10.2134/agronj2013.0114>.

Piepho, H. P., A. Büchse, and K. Emrich. 2003. “A Hitchhiker’s Guide to Mixed Models for Randomized Experiments.” *Journal of Agronomy and Crop Science* 189 (5): 310–22. <https://doi.org/10.1046/j.1439-037X.2003.00049.x>.

Piepho, H. P., A. Büchse, and C. Richter. 2004. “A Mixed Modelling Approach for Randomized Experiments with Repeated Measures.” *Journal of Agronomy and Crop Science* 190 (4): 230–47. <https://doi.org/10.1111/j.1439-037X.2004.00097.x>.

Piepho, Hans-Peter, Doreen Gabriel, Jens Hartung, Andreas Büchse, Meike Grosse, Sabine Kurz, Friedrich Laidig, et al. 2022. “One, Two, Three: Portable Sample Size in Agricultural Research.” *The Journal of Agricultural Science* 160 (6): 459–82. <https://doi.org/10.1017/S0021859622000466>.