

# **PRINCIPES D'EXPÉRIMENTATION**

Planification des expériences  
et analyse de leurs résultats

Pierre Dagnelie

# **INDEX DES TRADUCTIONS ET SIGLES ANGLAIS**

**2012**

Presses agronomiques de Gembloux

[pressesagro.gembloux@ulg.ac.be](mailto:pressesagro.gembloux@ulg.ac.be)

[www.pressesagro.be](http://www.pressesagro.be)

ISBN 978-2-87016-117-3

**ou**

Édition électronique

[www.dagnelie.be](http://www.dagnelie.be)



# Index des traductions et sigles anglais

L'index renvoie à l'introduction (introd.), aux différents paragraphes  
et à la synthèse (synth.).

<i><math>\alpha</math>-design:</i> 9.1.5.4°	<i>Balanced:</i> 12.4.1.2°
<i>Active contrast:</i> 5.2.5°	<i>Balanced for carry-over effects:</i> 8.2.3.1°
<i>Active effect:</i> 5.2.5°	<i>Balanced incomplete blocks:</i> 9.1.2.1°
<i>Adaptive experiment:</i> 2.4.4.1°	<i>Balanced lattice:</i> 9.1.3.4°
<i>Additive main effects and multiplicative interaction:</i> 11.1.2.6°	<i>Balanced lattice square:</i> 9.1.3.1°
<i>Adjusted mean:</i> 9.2.1.2°	<i>Baseline:</i> 4.1.2°
<i>Agroforestry:</i> 12.2.1°	<i>Bayesian method:</i> 12.8
<i>Alias:</i> 2.3.3.2°	<i>BIB:</i> 9.1.2.1°
<i>Aliased:</i> 2.3.3.2°	<i>Binary data:</i> 4.2.1°
<i>Alpha-design:</i> 9.1.5.4°	<i>Bioequivalence:</i> 1.1.1.3°
<i>AMMI:</i> 11.1.2.6°	<i>Blocking:</i> 6.3.6°
<i>Analysis of covariance:</i> 12.4.2.1°	<i>Border:</i> 3.2.2.1°
<i>Analysis of variance:</i> 5.2.1°	<i>BOX-BEHNKENS's design:</i> 2.4.1.5°
<i>ANCOVA:</i> 12.4.2.1°	<i>Buffer interval:</i> 3.2.2.4°
<i>ANOCOVA:</i> 12.4.2.1°	<i>Canonical analysis:</i> 11.1.2.6°
<i>ANOVA:</i> 5.2.1°	<i>Canonical variate analysis:</i> 11.1.2.6°
<i>A-optimal design:</i> 2.4.3.7°	<i>Carry-over effect:</i> 8.2.3.1°
<i>A-optimality:</i> 2.4.3.7°	<i>Central composite design:</i> 2.4.1.3°
<i>Augmented incomplete blocks:</i> 9.1.2.5°	<i>Change-over:</i> 8.1.2
<i>Augmented Latin square:</i> 8.4.3°	<i>Check:</i> 2.2.2.1°
<i>Autoregressive:</i> 12.3.3.3°	<i>Check observation:</i> 4.1.4°
<i>Average optimality:</i> 2.4.3.7°	<i>Check treatment:</i> 2.2.2.1°
	<i>Clinical trial:</i> introd.

- Cluster randomized design*: 5.1.3°  
*Column*: 8.1.1.1°  
*Complementary design*: 9.1.2.3°  
*Complete blocks*: 6.1.1.1°  
*Complete confounding*: 10.1.3.1°  
*Complete factorial design*: 2.3.1.3°  
*Complete Latin square*: 8.4.2°  
*Completely randomized design*: 5.1.1°  
*Compliance*: 1.2.1.3°  
*Component analysis*: 11.1.2.6°  
*Compound symmetry*: 11.2.2.2°  
*Computer experiment*: 2.4.5.1°  
*Confirmatory experiment*: 1.2.2.2°  
*Confounding*: 10.1.1  
*Constant factor*: 2.1.1.3°  
*Constrained randomization*: 5.3.2°  
*Contour curve*: 6.5.3.5°  
*Control*: 2.2.2.1°  
*Controlled factor*: 2.1.1.3°  
*Correlogram*: 3.5.3.1°  
*Counting*: 4.2.1°  
*Covariate*: 12.4.2.1°  
*Criss-cross*: 7.1.3.1°  
*Crop rotation*: 11.2.3.1°  
*Cross-over*: 8.1.2  
  
*Defining contrast*: 10.1.5.2°  
*Dependent variable*: 4.1.1°  
*Design of experiment*: introd.  
*Dispersion matrix*: 2.4.3.8°  
*DOE*: introd.  
*DOEHLERT's design*: 2.4.1.6°  
*D-optimal design*: 2.4.3.7°  
*D-optimality*: 2.4.3.7°  
*Double-blind experiment*: 2.2.2.4°  
*Drop-out*: 1.2.1.3°  
*Dummy variable*: 12.4.3.1°  
  
*Efficacy*: 1.1.1.3°  
*Enumeration*: 4.2.1°  
*E-optimal design*: 2.4.3.7°  
  
*E-optimality*: 2.4.3.7°  
*Equivalence*: 1.1.1.3°  
*Error 1*: 7.2.1.1°  
*Error 2*: 7.2.1.1°  
*Evolutionary operation*: 2.4.4.4°  
*EVOP*: 2.4.4.4°  
*Experiment*: introd.  
*Experiment matrix*: 2.3.2.9°  
*Experimental design*: introd.  
*Experimental method*: introd.  
*Experimental point*: 2.3.2.1°  
*Experimental program*: 1.2.2.1°  
*Experimental strategy*: 1.2.2.1°  
*Experimental unit*: 3.1.1°  
*Experimentation*: introd.  
*Exploratory experiment*: 1.2.2.2°  
  
*Factor*: 2.1.1.1°  
*Factor analysis*: 11.1.2.6°  
*Factorial design*: 2.3.1.3°  
*Fertility gradient*: 3.3.1°  
*Fertility trend*: 3.3.1°  
*Field book*: 4.2.2°  
*Fixed-rotation experiment*: 11.2.3.1°  
*Form*: 4.2.2°  
*Fractional factorial design*: 2.3.1.3°  
*Fractional replication*: 2.3.3.1°  
*Frame*: 4.2.2°  
*Frequency square*: 8.4.2°  
*F-square*: 8.4.2°  
  
*General linear model*: 12.4.3.1°  
*Generalized lattice*: 9.1.5.4°  
*Generalized least squares*: 12.4.3.3°  
*Generalized linear mixed model*: 12.4.4.2°  
*Generalized linear model*: 12.4.4.2°  
*Genotype-environment interaction*:  
    11.1.2.4°  
*Geostatistics*: 3.5.3.2°  
*GLM*: 12.4.3.1°  
*GLS*: 12.4.3.3°  
*Good clinical practices*: 1.2.3

- Good experimental practices*: 1.2.3  
*G-optimal design*: 2.4.3.7°  
*G-optimality*: 2.4.3.7°  
*Gradient*: 5.3.1°  
*Graeco-Latin square*: 8.4.1°  
*Group randomized design*: 5.1.3°  
*Group sequential design*: 2.4.4.4°  
*Guard row*: 3.2.2.1°
- HADAMARD's matrix: 2.2.3.8°  
*Half fraction*: 2.3.3.6°  
*Half-normal plot*: 5.2.4°  
*Half replication*: 2.3.3.6°  
*Hard-to-change factor*: 5.3.3°  
 HOKE's design: 2.4.1.7°  
 HUYNH-FELDT's condition: 11.2.2.2°
- Incidence matrix*: 12.4.3.1°  
*Incomplete blocks*: 9.1.1  
*Incomplete factorial design*: 2.3.1.3°  
*Incomplete Latin square*: 9.1.4.1°  
*Indicator variable*: 12.4.3.1°  
*Information matrix*: 2.4.3.8°  
*Initial observation*: 4.1.2°  
*Inter-block information*: 9.2.1.4°  
*Intercropping*: 12.2.1°  
*Interim analysis*: 4.1.3°  
*Interim observation*: 4.1.3°  
*Intermediate analysis*: 4.1.3°  
*Intermediate observation*: 4.1.3°  
*Intra-block information*: 9.2.1.4°  
*Isoresponse curve*: 6.5.3.5°
- KOSHAL's design: 2.3.2.1°
- Lab book*: 4.2.2°  
*Land equivalent ratio*: 12.2.2°  
*Latin cube*: 8.4.2°  
*Latin hypercube*: 8.4.2°  
*Latin square*: 8.1.1.1°  
*Latinized  $\alpha$ -design*: 9.1.5.4°  
 LENTH's method: 5.2.5°
- LER*: 12.2.2°  
*Level*: 2.1.1.2°  
*Linear mixed model*: 12.4.4.1°  
*Linear model*: 12.4.3.1°  
*Link function*: 12.4.4.2°  
*Longitudinal data*: 11.2.1.1°  
*Long-term experiment*: 11.2.1.1°
- Magic Latin square*: 8.4.2°  
*Main experiment*: 1.2.2.2°  
*Main observation*: 4.1.1°  
 MANOVA: 12.4.5.1°  
 MAUCHLY's test: 11.2.2.3°  
 MCAR: 12.5.2°  
*Measurement*: 4.2.1°  
*Meta-analysis*: 11.1.1.3°  
*Missing completely at random*: 12.5.2°  
*Missing data*: 6.3.5°  
*Missing not at random*: 12.5.2°  
*Misuse*: introd.  
*Mixed crops*: 12.2.1°  
*Mixed model*: 12.4.4.1°  
*Mixture*: 2.4.2.1°  
 MNAR: 12.5.2°  
*Model matrix*: 2.4.3.8°  
*Multi-annual experiment*: 11.1.1.1°  
*Multi-centre experiment*: 11.1.1.3°  
*Multi-environment experiment*: 11.1.1.1°  
*Multi-location experiment*: 11.1.1.1°  
*Multiple imputation*: 12.5.2°  
*Multi-rotation experiment*: 11.2.3.1°  
*Multi-step experiment*: 2.4.4.1°  
*Multivariate analysis of variance*: 12.4.5.1°
- Nearest neighbour*: 12.3.3.1°  
*Nearly balanced design*: 8.2.3.1°  
*Neighbour-balanced design*: 12.3.1.1°  
*Noise*: 2.1.1.5°  
*Nominal data*: 4.2.1°  
*Non-inferiority*: 1.1.1.3°  
*Numerical experiment*: 2.4.5.1°

- Observation*: introd.  
*Observational study*: introd.  
*Off-station experiment*: 1.2.1.2°  
*OLS*: 12.4.3.3°  
*One-factor-at-a-time*: 2.3.1.2°  
*On-farm experiment*: 1.2.1.2°  
*On-station experiment*: 1.2.1.2°  
*Optimal design*: 2.4.3.1°  
*Ordinal data*: 4.2.1°  
*Ordinary least squares*: 12.4.3.3°  
*Orthogonal design*: 2.3.2.10°  
*Orthogonal Latin square*: 8.4.1°  
*Orthogonality*: 2.3.2.10°  
*Output*: 4.1.1°
- PAPADAKIS's method*: 12.3.3.1°  
*Parallel group design*: 5.1.3°  
*Partial confounding*: 10.1.3.1°  
*Partial least squares*: 11.1.2.6°  
*Partially balanced design*: 9.1.5.1°  
*Partially balanced incomplete blocks*:  
 9.1.5.2°  
*PBIB*: 9.1.5.2°  
*PCA*: 11.1.2.6°  
*Perennial crop*: 11.2.1.1°  
*Perennial plant*: 11.2.1.1°  
*Pilot experiment*: 3.5.1.1°  
*Placebo*: 2.2.2.4°  
*PLACKETT-BURMAN's design*: 2.3.3.8°  
*Planning*: introd.  
*Plot*: 3.1.2°  
*PLS*: 11.1.2.6°  
*Post-blocking*: 12.6.2°  
*Post-mortem*: 12.6.2°  
*Prediction variance*: 2.4.3.2°  
*Preliminary experiment*: 1.2.2.2°  
*Preliminary observation*: 4.1.2°  
*Primary observation*: 4.1.1°  
*Principal component analysis*: 11.1.2.6°  
*Proportional sizes*: 12.4.1.2°  
*Pseudo-random number*: 5.1.2°
- Qualitative data*: 4.2.1°  
*Qualitative factor*: 2.1.1.1°  
*Quantitative data*: 4.2.1°  
*Quantitative factor*: 2.1.1.1°  
*Quasi-Latin square*: 10.3
- Radial design*: 2.3.1.2°  
*Random field*: 3.5.3.2°  
*Random number*: 5.1.2°  
*Random permutation*: 5.1.2°  
*Randomization*: 5.1.1°  
*Randomized blocks*: 6.1.1.1°  
*Randomized complete blocks*: 6.1.1.1°  
*Randomized design*: 5.1.1°  
*Rank*: 4.2.1°  
*Ranked qualitative factor*: 2.1.1.2°  
*Recovery of inter-block information*:  
 9.2.1.4°  
*Rectangular lattice*: 9.1.5.3°  
*Relative efficiency*: 6.3.2°  
*Relative total yield*: 12.2.2°  
*REML*: 11.1.2.6°  
*Repeated measurements*: 11.2.1.1°  
*Repeated measurements over time*:  
 11.2.1.1°  
*Replicate*: 3.4.1°  
*Replication*: 3.4.1°  
*Residual*: 12.6.1°  
*Residual effect*: 8.2.3.1°  
*Resolution*: 2.3.3.7°  
*Resolvable design*: 9.1.2.1°  
*Response*: 4.1.1°  
*Response surface*: 2.4.1.1°  
*Restricted maximum likelihood*: 11.1.2.6°  
*Restricted randomization*: 5.3.2°  
*ROQUEMORE's design*: 2.4.1.7°  
*Rotatability*: 2.4.1.4°  
*Rotation*: 11.2.3.1°  
*Row*: 8.1.1.1°  
*Row-and-column design*: 8.4.3°

- Row-column design*: 8.4.3°  
*Run*: introd.  
  
*Sampling*: 4.2.4°  
*Saturated design*: 2.3.3.8°  
*Scale*: 4.2.3°  
*Screening*: 1.2.2.4°  
*Self-orthogonal Latin square*: 8.4.2°  
*Semi-Latin square*: 9.1.5.4°  
*Semi-variogram*: 3.5.3.1°  
*Sensory analysis*: 4.2.3°  
*Sensory evaluation*: 4.2.3°  
*Sequential experiment*: 2.4.4.1°  
*Shape*: 3.3.1°  
*Signal*: 2.1.1.5°  
*Simplex*: 2.4.2.4°  
*Simplex-lattice*: 2.4.2.4°  
*Simulation*: 12.9.1°  
*Single replication*: 2.3.2.8°  
*Size*: 3.2.1.1°  
*SMITH's model*: 3.5.2.1°  
*SMITH's variance law*: 3.5.2.1°  
*Space-filling design*: 2.4.5.2°  
*Spacing*: 3.3.3°  
*Spatial analysis*: 3.5.3.1°  
*Spatial correlation*: 3.5.3.1°  
*Spatial variation*: 3.5.3.1°  
*Sphericity test*: 11.2.2.3°  
*Split-block*: 7.1.3.1°  
*Split-lot*: 7.1.2.1°  
*Split-plot*: 7.1.1.1°  
*Split-split-plot*: 7.1.1.2°  
*Standard Latin square*: 8.1.1.3°  
*Star design*: 2.3.1.2°  
*Steepest ascent*: 2.4.4.4°  
*Stopping rule*: 4.1.3°  
*Stratification*: 6.1.2.3°  
*Strip-block*: 7.1.3.1°  
*Strip-plot*: 7.1.3.1°  
*Structuring*: 11.1.2.4°  
*Sub-block*: 7.1.1.1°  
*Suboptimal design*: 2.4.3.7°
- Sub-plot*: 7.1.1.1°  
*Sub-sub-plot*: 7.1.1.2°  
*Sub-sub-unit*: 7.1.1.2°  
*Sub-unit*: 7.1.1.1°  
*Superiority*: 1.1.1.3°  
*Supersaturated design*: 2.3.3.8°  
*Survey*: introd.  
*Switch-over*: 8.1.2  
*Symmetrical design*: 9.1.2.3°  
*Systematic check plots*: 12.3.2.1°  
*Systematic design*: 5.3.4°  
  
*TAGUCHI's design*: 2.3.3.10°  
*Test of additivity*: 8.2.1.2°  
*Treatment*: introd.  
*Treatment design*: introd.  
*Treatment structure*: introd.  
*Trend*: 5.3.1°  
*Trend-free design*: 5.3.4°  
*Trend-robust design*: 5.3.4°  
*Trial*: introd.  
*Trojan square*: 9.1.5.4°  
*TUKEY's test*: 8.2.1.2°  
*Two-step experiment*: 2.4.4.1°  
*Two-treatment two-period cross-over*: 8.1.2  
*Type H matrix*: 11.2.2.2°  
  
*Unbalanced*: 12.4.1.2°  
*Uncontrolled factor*: 2.1.1.3°  
*Uniform design*: 2.4.5.2°  
*Uniform-balanced design*: 8.2.3.1°  
*Uniformity experiment*: 3.5.1.2°  
  
*Variety*: 9.1.2.1°  
*Variety-environment interaction*: 11.1.2.4°  
*Variogram*: 3.5.3.1°  
*VIK's square*: 8.4.2°  
  
*Wash out*: 3.2.2.5°  
*Whole plot*: 7.1.1.1°  
*Whole unit*: 7.1.1.1°  
  
*YOUDEN's square*: 9.1.4.1°